Statistics
1984

Ministry of
Natural
Resources

Hon. Michael Harris
Minister

Mary Mogford
Deputy Minister

85-4637/

STATISTICS

1984

A statistical supplement to the Annual Report of the Minister of Natural Resources for the year ending March 31, 1984.

$2.00

Statistical Reports
Prepared by Branches

3 MINISTRY OF NATURAL RESOURCES
4 Office of Deputy Minister
5 Ministry Regions and Districts

8 FOREST RESOURCES GROUP
8 Forest Resources Branch
9 Ontario Tree Improvement and Forest Biomass Institute
23 Timber Sales Branch

36 MINERAL RESOURCES GROUP
36 Ontario Geological Survey
43 Mineral Resources Branch
49 Mining Taxation and OMEP Office

52 OUTDOOR RECREATION GROUP
52 Wildlife Branch
61 Parks and Recreational Areas Branch
80 Fisheries Branch

95 LANDS AND WATERS GROUP
95 Land Management Branch
103 Surveys and Mapping Branch
108 Office of Indian Resource Policy
109 Conservation Authorities and Water Management Branch

111 AVIATION AND FIRE MANAGEMENT CENTRE

120 ADMINISTRATION DIVISION
121 Communications Services Branch
122 Personnel Services Branch
126 Legal Services Branch
136 Mining and Lands Commissioner
138 Finance and Administration Group
138 Systems Services Branch
138 Internal Audit Services Branch
139 Financial Resources Branch
145 Administrative Services Branch

147 REGIONS AND DISTRICTS
147 Northwestern Region
149 North Central Region
151 Northern Region
154 Northeastern Region
157 Algonquin Region
160 Eastern Region
162 Central Region
164 Southwestern Region

MINISTRY OF NATURAL RESOURCES

Main Office in Whitney Block, Parliament Buildings, Toronto, Ontario M7A 1W3

*Hon. Alan W. Pope.....	Minister of Natural Resources
**John R. Sloan.....	Deputy Minister
***M. Mogford.....	Assistant Deputy Minister, Administration
G. A. McCormack.....	Assistant Deputy Minister, Northern Ontario. Box 5000, 435 James St. South, Thunder Bay 'F', Ontario P7C 5G6 Northwestern Region North Central Region Northern Region Northeastern Region Aviation and Fire Management Centre
R. J. Burgar.....	Assistant Deputy Minister, Southern Ontario. Maple, Ontario L0J 1E0 Algonquin Region Eastern Region Central Region Southwestern Region

MINISTERIAL AGENCIES

G. H. Ferguson, Q.C.....	Mining and Lands Commissioner
I. D. Bird.....	General Manager, Algonquin Forest Authority

Please note the following executive revisions prior to printing:

*As of February 8, 1985.....	Hon. Michael Harris Minister of Natural Resources
**As of February 18, 1985.....	Mary Mogford Deputy Minister
***As of February 18, 1985.....	D. Johnstone Acting Assistant Deputy Minister

Other positions in this book are as of December 31, 1984

OFFICE OF DEPUTY MINISTER

Room W-6320, Main Office, Telephone (416) 965-2704

Deputy Minister	John R. Sloan	W-6320.....2704
Administrative Assistant	Mrs. I. Hart	W-6320.....5873
Science Adviser and Research Co-ordinator	Dr. M. F. Walmsley	W-6350.....5720
EXECUTIVE CO-ORDINATORS		
Forest Resources Group	K. A. Armson	W-3624.....4319
Mineral Resources Group	J. E. Finlay	W-6341.....4271
Outdoor Recreation Group	T. J. Millard	W-2341.....5661
Lands and Waters Group	H. A. Clarke	W-6626.....6046
Finance and Administration Group	D. J. Johnstone	W-6346.....6147
POLICY AND PLANNING SECRETARIAT		
Director (acting)	D. W. Simkin	W-6450.....8422
Secretary	Mrs. M. Forbes	W-6450.....8422
Outdoor Recreation Policy Officer	D. W. Simkin	W-6447.....6712
Forest Resources Policy Officer	E. E. Multamaki	W-6445.....6712
Mineral Resources Policy Officer	Ms. R. E. Booth-Horst	W-6453.....6712
Policy Officer - Northern Ontario	G. G. Pyzer	(807)...475-1271
Strategic Planning and Support	J. D. Ross	W-6446.....6371
Special Projects Officer	J. M. Kearns	W-6454.....6371
Land Use Planning Supervisor	L. A. Douglas	W-6452.....2899
Plan Input and Review Specialist	J. C. Slot	W-6448.....2899
Environmental Assessment	R. D. La Prairie	W-6449.....5344
Integrated Resource Management Planning Specialist	G. D. Rodgers	W-6451.....2899

MINISTRY REGIONS AND DISTRICTS

Areas in Square Kilometres *

NORTHWESTERN REGION		
Dryden	11,961	
Fort Frances	10,847	
Ignace	11,463	
Kenora	14,188	
Red Lake	64,105	
Sioux Lookout	112,097	224,661
Pt. Rainy Lake	1,222	
Pt. Lake of the Woods	2,427	3,649
Total, Region		228,310
NORTHERN REGION		
Chapleau	23,602	
Cochrane	30,715	
Gogama	7,752	
Hearst	25,245	
Kapuskasing	21,225	
Kirkland Lake	13,312	
Moosonee	215,741	
Timmins	7,899	345,491
Pt. Lake Abitibi	790	790
Total, Region		346,281
ALGONQUIN REGION		
Algonquin Park	9,376	
Bancroft	4,239	
Bracebridge	6,454	
Minden	4,745	
Parry Sound	7,187	
Pembroke	7,306	39,307
Pt. Georgian Bay	3,875	3,875
Total, Region		43,182

SOUTHWESTERN REGION		
Aylmer	6,731	
Chatham	7,389	
Owen Sound	7,817	
Simcoe	2,818	
Wingham	6,889	31,644
Pt. Lake Huron and Lake Erie	30,950	
Pt. Lake St. Clair	673	31,624
Total, Region		62,268
NORTH CENTRAL REGION		
Atikokan	11,321	
Geraldton	112,784	
Nipigon	25,574	
Terrace Bay	12,673	
Thunder Bay	28,451	190,803
Lake Nipigon	5,006	
Pt. Lake Superior	16,017	21,023
Total, Region		211,826
NORTHEASTERN REGION		
Blind River	9,516	
Espanola	9,523	
North Bay	10,668	
Sault Ste. Marie	7,912	
Sudbury	12,725	
Temagami	6,856	
Wawa	22,535	79,735
Pt. Lake Huron and Lake Superior	25,298	
Lake Nipissing	816	
Lake Wahnapitae	145	26,259
Total, Region		105,994

EASTERN REGION		
Brockville	3,496	
Carleton Place	6,277	
Cornwall	5,594	
Napanee	6,537	
Tweed	6,605	28,509
Pt. Lake Ontario	4,333	4,333
Total, Region		32,842
CENTRAL REGION		
Cambridge	7,141	
Huronia	6,550	
Lindsay	6,856	
Maple	4,812	
Niagara	2,670	28,029
Pt. Lake Ontario and Lake Erie	8,109	
Lake Simcoe	741	8,850
Total, Region		36,879
TOTALS		
47 Districts		968,179
12 Lakes		100,403
Area of Ontario		1,068,582

* August 19,1980
Surveys and Mapping Branch

FOREST RESOURCES GROUP

Room W-3623, Main Office Telephone (416) 965-2785

Executive Co-ordinator	K. A. Armson	W-3624...5-4319
Secretary	Ms. O. Andrews	W-3624...5-4319
Co-ordinator, Private land Forestry	W. K. Fullerton	W-3621...5-3040
Chief Forest Economist	Dr. F. Miller	W-3627...5-2785

FOREST RESOURCES BRANCH

Room W-3640, Main Office Telephone (416) 965-2575

Director	R. M. Monzon	W-3646...5-2787
Secretary	Mrs. J. Whorms	W-3646...5-2577
FOREST PRODUCTION & CONTROL DIVISION		
Supervisor	C. J. Heeney	W-3649...5-2575
Tree Seed & Forest Genetics Supvr	Ms. R. M. Rauter	W-3634...3-1334
Tree Seed Specialist	Ms. C. G. Graham	W-3632...3-1334
Forest Production Policy Section Spvr	J. R. Cary	W-3643...5-0378
Forest Production Analyst	J. A. Cooper	W-3650...5-2575
Silviculture Information Systems Analyst	M. A. Chaudhry	W-3652...5-2575
Stock Production Section Spvr	R. J. Reffle	W-3655...5-2575
Soil & Plant Analyst	V. Sadreika	W-3653...5-2575
Tree Distribution Co-ordinator	H. T. Tiemann	W-3654...5-2575
Silvicultural Data Controller	R. K. Crawford	W-3648...5-2575
Forest Practices Section Spvr	W. Vonk	W-3621...5-2785
Silviculture Mechanization Specialist	A. Citro	W-3633...3-1334
PRIVATE LAND FORESTRY DIVISION		
Section Spvr	R. N. Staley	W-3630...5-2785
Agreement Administrator	J. Brown	W3601....5-2731
Private Land Forestry Incentives Co-ordinator	Vacant	W-3632...5-2785
Private Land Forestry Promotion Co-ordinator	K. G. Higgs	W-3626...5-2785
PEST CONTROL DIVISION		
Section Spvr	R. G. McGauley	Maple..832-2761
Forest Entomologist	J. J. Churcher	Maple..832-2761
Forest Pathologist	Dr. J. A. Juswich	Maple..832-2761
Herbicide Specialist	Dr. R. A. Campbell	Maple..832-2761
Pesticide Applications Specialist	S. A. Nicholson	Maple..832-2761

ONTARIO TREE IMPROVEMENT AND FOREST BIOMASS INSTITUTE (OTIFBI)

Maple, Ontario L0J 1E0 Telephone (416) 832-2761

General Manager	D. P. Drysdale	832-2761
Executive Officer	D. Morgan	832-2761
Technology Transfer Specialist	D. Bates	832-2761
Scientific Photographer	J. Robinson	832-2761
TREE IMPROVEMENT AND BIOMASS SECTION		
Principal Scientist (acting)	Dr. G. Buchert	832-2761
Research Scientist Tree Breeding - Spruce	J. V. Hood	832-2761
Research Scientist Tree Breeding - Hard Pine	Dr. G. Buchert	832-2761
Forest Biomass Unit Leader	H. W. Anderson	832-2761
Research Scientist Upland Silviculture	P. Jaciw	832-2761
Research Scientist, Biotechnology	Dr. R. H. Ho	832-2761
Research Scientist, Roots	Dr. D. C. F. Fayle	832-2761
Research Scientist, Tree Seed	D. A. Skeates	832-2761
Research Scientist, Aspen Silviculture	D. Weingartner	Thunder Bay (807) 767-1607
Nursery/Greenhouse Arboreta Unit Leader	K. Bennett	832-2761
FOREST ECOLOGY AND SILVICULTURE SECTION		
Principal Scientist	Dr. D. Burger	832-2761
Scientist, Tree Physiology	Y. T. Kim	832-2761
Research Scientist, Boreal Mixed Woods	G. B. MacDonald	Thunder Bay (807) 767-1607
Biomath/Program Analyst	R. Forslund	Thunder Bay (807) 767-1607
Research Scientist, Plant Stock	S. Colombo	832-2761
Silviculture and Tree Biology Unit Leader	Dr. C. Glerum	832-2761
Silviculture Specialist	G. Stroempl	832-2761
OTIFBI Midhurst, Ontario L0L 1X0	R. Hutchison	(705) 737-5510
OTIFBI Box 190 Dorset, Ontario P0A 1E0	M. McLean	(705) 766-2671
OTIFBI Box 2960 Thunder Bay, Ontario P7B 5G5	K. M. McClain	(807) 767-1607
OTIFBI Box 490 Sault Ste. Marie, Ontario P6A 5M7	Dr. A. G. Gordon	(705) 949-9461

USE OF NURSERY STOCK IN YEAR ENDING MARCH 31,1984

Use	Bare Root	Container		Total
		Ministry	Contract	
Crown Land and Agreement Forest	43,814,543	14,743,138	25,256,448	83,814,129
W.I.A.	8,922,252	-	-	8,922,252
Other Private Land	14,184,101	-	-	14,184,101
Education or Science	552,085	-	-	552,085
Miscellaneous	-	-	-	-
TOTAL	67,472,981	14,743,138	25,256,448	107,472,567

FOREST TREES PRODUCED AND PURCHASED BY THE MINISTRY

Number of trees in years ending March 31

Year	Bare Root	Container		Total
		Ministry	Contract	
1975	59,794,450	3,148,406	-	62,942,856
1976	50,944,733	5,346,866	-	56,291,599
1977	45,981,122	4,291,764	-	50,272,886
1978	48,291,842	5,461,375	-	53,753,217
1979	52,928,125	5,487,210	-	58,415,335
1980	61,453,461	7,944,817	-	69,398,278
1981	65,360,243	10,496,839	-	75,857,082
1982	69,448,150	13,950,538	-	83,398,688
1983	63,660,427	10,999,088	5,466,142	80,125,657
1984	67,472,981	14,743,138	25,256,448	107,472,567

PLANTING STOCK DISTRIBUTION

Bare Root Nursery Stock	
conifers	64,593,432
hardwoods	2,879,549
Total	67,472,981
Container Stock	
ministry facilities	14,743,138
contract facilities	25,256,448
Total	39,999,586
GRAND TOTAL	107,472,567

TREE PRODUCTION BY SPECIES

Number of trees in years ending March 31

Species	1980	1981	1982	1983	1984
White Spruce	16,687,027	14,384,928	16,394,578	16,396,972	15,037,822
Black Spruce	11,800,627	17,365,106	17,155,688	18,847,802	35,772,366
Red Pine	8,215,238	8,534,677	7,493,071	6,707,858	7,125,973
Jack Pine	18,832,062	19,143,238	25,830,821	21,744,405	33,456,807
White Pine	5,181,787	6,431,427	6,451,959	7,595,781	7,575,437
White Cedar	1,461,566	2,381,005	2,806,775	2,984,424	2,355,744
Scotch Pine	1,483,794	1,500,375	1,545,425	906,075	1,874,825
Silver Maple	423,958	563,229	240,785	502,402	413,503
Norway Spruce	1,158,639	1,367,267	1,093,919	1,021,589	873,810
Carolina Poplar	532,077	583,863	532,351	404,549	404,128
Black Walnut	301,305	459,275	364,000	333,125	330,585
White Ash	222,264	256,239	283,281	57,218	100,099
European Larch	175,874	489,290	275,202	164,918	123,540
Yellow Birch	41,440	80,144	116,400	20,000	4,115
Red Oak	499,244	258,284	316,191	178,717	179,827
Black Locust	190,235	203,250	164,475	217,950	158,875
Tamarack	255,211	143,777	309,506	434,983	163,826
Hemlock	529	68,746	272	14,725	17,264
Cottonwood	-	53,725	-	-	-
Hybrid Poplar					
Rooted	110,839	112,422	108,484	53,042	52,504
Unrooted	943,821	818,530	1,061,811	1,079,038	954,520
Japanese Larch	253,366	156,965	293,631	129,350	162,350
Aspen, unrooted	91,948	-	-	7,880	-
Other Species	535,427	501,320	560,063	322,854	334,647
TOTALS	69,398,278	75,857,082	83,398,688	80,125,657	107,472,567

TREES SUPPLIED FOR PLANTING ON PRIVATE LANDS

in years ending March 31

County, District or Regional Municipality	1980	1981	1982	1983	1984
Algoma	281,900	305,955	190,825	251,205	373,630
Brant	207,300	222,850	129,055	122,125	169,600
Bruce	282,953	194,197	278,020	138,851	193,992
Cochrane	560,600	705,480	1,072,250	536,825	792,140
Dufferin	486,250	507,385	470,585	307,250	368,495
Dundas	129,705	125,453	68,475	73,972	121,360
Durham*	480,901	479,450	538,150	487,200	531,925
Elgin	207,066	208,435	209,899	189,162	197,437
Essex	189,420	208,541	188,513	199,307	225,781
Frontenac	115,695	136,700	193,486	112,800	115,110
Glengarry	76,675	190,742	166,500	136,350	74,800
Grey	427,215	524,400	503,740	487,980	568,150
Haldimand	298,566	524,307	74,190	89,475	153,652
Haliburton	73,200	48,100	33,800	26,800	23,700
Halton	250,970	274,165	137,575	105,385	182,883
Hastings	172,443	169,042	317,973	178,422	360,897
Huron	185,406	273,100	198,264	147,279	244,654
Kenora	102,300	273,900	189,175	519,125	529,050
Kent	137,535	303,225	233,185	320,655	270,300
Lambton	178,900	192,941	239,577	174,693	150,309
Lanark	199,312	260,175	203,900	155,000	158,850
Leeds & Grenville	369,040	297,361	333,375	249,795	328,626
Lennox & Addington	126,175	107,775	128,350	154,095	109,600
Manitoulin	55,500	27,400	15,100	16,350	20,125
Middlesex	340,788	616,575	433,402	440,800	480,350
Muskoka	66,250	73,250	68,150	57,845	56,459
Niagara	299,162	366,493	365,481	211,336	310,746
Nipissing	98,125	41,925	60,770	75,455	293,100
Norfolk	32,600	1,100	411,302	431,250	314,710
Northumberland*	330,345	326,280	530,657	423,148	387,473
Ontario*	3,008	-	2,610	1,700	-
Ottawa-Carleton	396,699	300,615	265,310	160,530	162,805
Oxford	232,888	275,075	197,278	175,996	150,975
Parry Sound	273,600	338,250	188,650	50,625	155,225
Peel	295,543	289,669	265,910	188,300	192,635

County, District or Regional Municipality	1980	1981	1982	1983	1984
Perth	200,053	177,450	135,535	169,190	114,115
Peterborough	195,967	202,400	133,920	148,111	217,215
Prescott	225,425	123,875	142,825	250,400	131,150
Prince Edward	79,000	86,825	71,650	72,100	166,150
Rainy River	83,675	97,325	101,750	13,650	67,940
Renfrew	262,425	420,025	229,550	282,925	595,720
Russell	182,200	207,150	174,655	128,150	133,855
Simcoe	1,044,115	1,268,225	1,143,650	1,006,995	1,096,576
Stormont	84,518	138,703	50,100	60,500	93,095
Sudbury	372,482	465,222	415,335	590,029	490,255
Thunder Bay	133,675	418,325	113,325	62,975	206,150
Timiskaming	38,550	40,300	12,250	23,400	154,950
Victoria	250,207	283,922	278,930	204,725	251,689
Waterloo	267,950	170,052	111,100	86,757	190,075
Wellington	673,675	759,815	709,700	798,607	675,938
Wentworth	365,465	365,135	324,423	299,198	350,579
York	603,273	568,025	410,582	438,280	478,705
Durham Regional Municipality	-	1,550	150	-	400

	TOTALS
1980	13,026,690#
1981	14,984,610#
1982	13,449,912#
1983	12,032,896#
1984	14,184,101#

Excluding W.I.A.

* Totals do not reflect formation of the Regional Municipality of Durham

FOREST AREAS MANAGED BY THE MINISTER

in hectares at March 31, 1984

Agreement Holders	Term of Agreement	Added 1983-84	Total
GOVERNMENT OF CANADA			
National Capital Commission	Apr. 1961 - Mar. 2011	-	1,704.13
22 CONSERVATION AUTHORITIES			
Ausable Bayfield	*Jan. 1983 - Mar. 2004	40.47	1,814.21
Cataraqui Region	Apr. 1971 - Mar. 1996		342.31
Catfish Creek	Apr. 1962 - Mar. 2002		254.55
Crowe Valley	Jan. 1963 - Dec. 2003		80.94
Ganaraska	*Apr. 1977 - Mar. 2002		3,496.18
Grand River	Apr. 1961 - Mar. 2000		1,657.72
Lakehead Region	May 1958 - Apr. 2008		670.85
Long Point Regional	*Apr. 1982 - Mar. 2000		2,591.32
Lower Thames Valley	Apr. 1964 - Mar. 1984		121.41
Maitland Valley	Apr. 1955 - Mar. 2005		343.58
Metropolitan Toronto & Region	Apr. 1975 - Mar. 2000		785.90
Moira River	Apr. 1978 - Mar. 2000		6,807.13
Napanee Region	Oct. 1954 - Oct. 2004		2,732.44
Niagara Peninsula	June 1963 - Mar. 2003		75.27
North Grey Region	June 1958 - June 2008		2,882.67
Otonabee Region	Apr. 1976 - Mar. 2002		1,465.04
Raison Region	Apr. 1971 - Mar. 2001		137.59
Sauble Valley	Apr. 1960 - Mar. 2002		1,547.52
Saugeen Valley	Apr. 1960 - Mar. 2002	27.92	5,285.39
South Nation River	Apr. 1975 - Mar. 2000		3,072.83
St. Clair Region	May 1965 - Apr. 1985		60.70
Upper Thames River	Apr. 1961 - Mar. 2001		1,363.29
Sub-total		68.39	37,588.84

Note: None released 1983-84.

Agreement Holder	Term of Agreement	Released 1983-84	Total
8 TOWNSHIPS			
Bonfield	TERMINATED Nov. 1983	24.28	---
Charlottenburgh	Apr. 1975 - Mar. 1995		77.70
Cramahe	Apr. 1963 - Mar. 2003		65.56
Cumberland	July 1980 - June 2030		371.68
Darlington	Apr. 1971 - Mar. 1991		56.66
Macher	Sept 1963 - Aug. 1993		36.42
Mosa	Apr. 1963 - Mar. 2003		58.27
Torbolton	Apr. 1983 - Mar. 2003		174.34
Williamsburg	Apr. 1962 - Mar. 2002		161.87
Sub-total		24.28	1,002.50

Note: None added 1983-84

Agreement Holder	Term of Agreement	Added 1983-84	Total
19 COUNTIES			
Brant	Apr. 1960 - Mar. 2000		40.19
Bruce	Apr. 1962 - Mar. 2002		6,106.03
Dufferin	Apr. 1971 - Mar. 1991		1,019.21
Grey	Apr. 1960 - Mar. 2000		3,481.19
Huron	Apr. 1960 - Mar. 2000		662.30
Kent	Apr. 1960 - Mar. 2000		30.51
Lanark	Apr. 1980 - Mar. 2000	202.34	3,711.37
Leeds & Grenville	Apr. 1975 - Mar. 1995		5,802.18
Lennox & Addington	Apr. 1960 - Mar. 2000		473.04
Middlesex	Apr. 1960 - Mar. 2000		980.96
Northumberland	Apr. 1981 - Mar. 2001	35.61	2,603.98
Oxford	Apr. 1961 - Mar. 2000		342.06
Peterborough	Apr. 1981 - Mar. 2001		80.94
Prescott & Russell	*Apr. 1983 - Mar. 2003	40.47	10,581.00
Renfrew	Apr. 1960 - Mar. 2000		6,498.32
Simcoe	Apr. 1960 - Mar. 2000		10,600.14
Stormont, Dundas & Glengarry	Apr. 1975 - Mar. 2000	23.47	3,077.03
Victoria	Nov. 1976 - Mar. 2000		3,794.71
Wellington	*Apr. 1963 - Mar. 2003		521.44
Sub-total		301.89	60,406.60

Note: Released 1983-84, 1.23, Grey County.

Agreement Holder	Term of Agreement	Added 1983-84	Total
6 REGIONAL MUNICIPALITIES			
Durham	*May 1980 - Apr. 2000		591.05
Halton	Apr. 1976 - Mar. 2000		632.29
Hamilton-Wentworth	Apr. 1961 - Mar. 1981		391.19
Ottawa-Carleton	Apr. 1974 - Mar. 2004		5,484.11
Waterloo	Apr. 1976 - Mar. 2001	45.05	304.54
York	Apr. 1977 - Mar. 2007		2,030.48
Sub-Total		45.05	9,433.66
Note: None released 1983-84.			
INDUSTRY			
Domtar Inc.	Apr. 1974 - Mar. 1999		900.02

TOTAL 57 Managed Forest Areas

Added 1983-84	415.33
Released 1983-84	25.51
Total	111,035.75

* Replacement Agreement

SILVICULTURE OPERATIONS 1983-84
Classification of Cutover Forest Land
Area in hectares

	Crown Land	FMAs	Total Crown Lands	Agree-ment Forests	W.I.A.	Other Patent Lands	Total
Harvest Cut, evenaged management	110,935	31,116	142,051	1,249	188	9,598	153,086
Harvest Cut, unevenaged management	12,956	-	12,956	85	842	16,239	30,122
TOTAL	123,891	31,116	155,007	1,334	1,030	25,837	183,208

SUMMARY OF SILVICULTURAL OPERATIONS

Areas in Hectares in year ending March 31, 1984

	Crown Lands	Forest Management Agreements	Total Crown Lands
REGENERATION			
Planting Bare Root Stock	13,751	7,535	21,286
Planting Container Stock	9,727	8,162	17,889
Planting Hybrid Poplar Cuttings	212	74	286
Seeding	14,113	7,067	21,180
Scarification	831	279	1,110
Strip Cutting	469	249	718
Seed Tree Cutting	2,850	1,354	4,204
Shelterwood Cutting	10,308	-	10,308
Clear Cutting	10,393	3,728	14,121
Total	62,654	28,448	91,102
RE-TREATMENT			
Re-treatment area included in planting and total regeneration figures above	3,020	463	3,483
TENDING			
Hand Clearing	4,834	1,448	6,282
Herbicide Spraying	7,487	13,638	21,125
Thinning Improvement Cuts	6,834	74	6,908
Pruning	751	-	751
Fertilization Drainage	207	-	207
Total	20,113	15,160	35,273
SITE PREPARATION	43,380	30,684	74,064
MARKING	42,298	3	42,301
TOTAL AREA TREATED	168,445	74,295	242,740

Agreement Forests	W.I.A.	Sub-total	Other Patent Lands	Total
119	5,405	26,810	3,213	30,023
73	126	18,088	60	18,148
157	57	500	101	601
1	-	21,181	65	21,246
-	-	1,110	-	1,110
-	-	718	2	720
-	-	4,204	-	4,204
35	122	10,465	214	10,679
22	92	14,235	1,643	15,878
407	5,802	97,311	5,298	102,609
61	1,334	4,878	-	4,878
91	492	6,865	202	7,067
457	2,188	23,770	2,087	25,857
1,513	2,545	10,966	1,841	12,807
406	409	1,566	9	1,575
32	15	254	-	254
2,499	5,649	43,421	4,139	47,560
379	1,854	76,297	735	77,032
2,431	3.974	48 706	7,778	56,484
5,7	17,279	265,735	17,950	283,685

CROWN LANDS TREATED

Areas in hectares in years ending March 31

Silvicultural Operations	1980	1981	1982	1983	1984
REGENERATION					
Planting Bare Root Stock	19,830	18,786	22,561	21,272	21,286
Planting Container Stock	3,860	4,829	6,357	7,305	17,889
Planting Hybrid Poplar Cuttings	-	24	31	19	286
Seeding	24,251	47,296	27,869	29,857	21,180
Scarification	2,392	3,241	1,653	817	1,110
Strip Cutting	2,058	1,562	2,879	1,445	718
Seed Tree Cutting	7,339	3,934	3,100	3,215	4,204
Shelterwood Cutting	9,867	9,794	7,738	9,431	10,308
Clear Cutting	2,266	6,202	4,909	7,552	14,121
Total	71,863	95,668	77,097	80,913	91,102
RE-TREATMENT	2,072	7,981	2,263	2,353	3,483
TENDING					
Hand Cleaning	5,326	4,481	3,686	5,844	6,282
Herbicide Spraying	13,156	25,404	19,668	26,165	21,125
Thinning Improvement Cuts	8,511	8,209	6,679	6,698	6,908
Pruning	695	853	618	756	751
Fertilization Drainage	172	166	163	87	207
Total	27,860	39,113	30,814	39,550	35,273
SITE PREPARATION	49,061	51,057	53,289	67,583	74,064
MARKING	50,607	43,390	38,954	37,229	42,301
TOTAL AREA TREATED	201,463	237,209	202,417	225,275	242,740

TREE SEED PROGRAM 1983-84

SEED COLLECTION

Seed Crop By Species	Volume Collected (hl)
Jack pine	18,064.35
Black spruce	580.30
White spruce	82.88
White pine	110.10
White cedar	32.57
Red pine	199.77
Black walnut	1,543.30
Other species	177.34
Total	20,790.61

1983 SEED DISTRIBUTION

Direct seeding	995,400,000
Nursery stock production	560,360,000
Container stock production	118,370,000
Research and miscellaneous	49,900,000
Total viable seed	1,724,030,000

SEED IN STORAGE AS OF MARCH 31, 1984 (ONTARIO TREE SEED PLANT)

No. of viable seed (billion)	10.530
No. of different species	74
Total weight (kg)	36,274
Total value (million)	$5.4

TREE SEED AREAS

Areas in hectares

Species	Seed Collection Areas	Seed Production Areas	Seed Orchards (areas planted to date)
Black Spruce	554.7	171	68.4
White Spruce	202.8	212.8	18.4
White Pine	253	579.5	20.5
Jack Pine	11,476.7	1,195.4	2.5
Others	470.7	539.4	17.9
Total	12,957.9	2,698.1	127.7

1983-84 FORESTRY EXTENSION ACTIVITIES

Inquiries serviced	112,654
Field inspections	8,748
Advisory service plans prepared	1,246
Volume of timber marked - sawlogs (cubic metres)	348,123
- pulpwood (cubic metres)	54,123
- fuelwood (cubic metres)	209,185
Public education activities	1,649
Forestry instruction - youth groups (no.)	242
Forestry instruction - education facilities (hrs.)	4,197
Total trees planted - private orders	14,184,101

THE WOODLANDS IMPROVEMENT ACT

	No. of Agreements	Area in Hectares
New W.I.A. Agreements Activated in 1983-84	553	5,518
Total W.I.A. Agreements in effect to March 31, 1984	9,802	151,213
New Advisory Service Agreements Activated in 1983-84	75	1,326
Advisory Service Agreements in effect to March 31,1984	172	2,467

Total Trees Planted - W.I.A.: 8,922,252

FOREST RESOURCES GROUP

TIMBER SALES BRANCH

Room W-3610, Main Office Telephone (416) 965-2731 or 963-2396

Director	E. Markus	W-3612...965-3948
Special Projects Co-ordinator	R. P. Alton	W-3610.....3-2396

TIMBER ALLOCATION SECTION

Supervisor	K. E. Cleary	W-3611...3-2396
Timber Licensing Spvr	R. Beny	W-3610...3-2396
Licensing Unit Spvr	F. C. Parris	W-3601...5-2731
Resource Economist	I. A. Nausedas	W-3601...5-2731
Industry Liaison Officer	W. D. Wardle	W-3625...5-2785

MANAGEMENT PLANS SECTION

Supervisor	A. M. van Fraassen	W-3522...5-7631
Mensuration Unit		
Chief Mensurationist	J. A. Mervart	W-3526...5-7631
Mensurationist	A. F. Beckwith	Maple. 832-2761
Site & Productivity Analyst	G. Pierpoint	Maple..832-2761
Biomathematician	F. L. Raymond	Maple..832-2761
Methods and Procedures Specialist	D. C. MacIver	W-3527...5-7631
Planning Unit		
Planning Analyst	G. Protich	W-3525...5-7631
Planning Analyst	H. van Bers	W-3523...5-7631
FMA Co-ordinator	T. J. Tworzyanski	W-3524...5-7631

WOOD MEASUREMENT SECTION

Supervisor	J. H. Butts	W-3642...5-0378
Provincial Wood Measurement Training Officer	J. Bingley	W-3641...5-0378
Senior Data Processing Officer	R. G. Johnson	W-3641...5-0378
Data Control Officer	I. Mahler	W-3641...5-0378

FOREST MANAGEMENT INFORMATION SECTION

Supervisor	J. E. Osborn	W-3542...5-6914
Forest Resources Inventory Unit Supervisor	D. B. Cardwell	W-3544...5-6914
Darkroom Spvr	J. Howard	W-3520...5-6914
Operations Manager	D. Trafford	W-3543...5-6914
Photo Interpretation Spvr	A. Manley	W-3546...5-6914
FORMAGAIN Unit Supervisor	W. E. Jenns	M1B-43...3-0822

MANAGEMENT UNITS

Areas in square kilometres at March 31

	CROWN LAND FORESTS					
	Crown		Company		FMA	
Year	No.	Area	No.	Area	No.	Area
1980	88	334,418.0	17	198,751.0	-	-
1981	78	333,402.0	14	165,016.0	5	45,584.0
1982	82	333,571.0	15	156,006.0	8	52,406.0
1983	77	333,781.0	13	139,120.0	13	70,218.0
1984	75	321,122.0	12	126,461.0	17	88,971.0

AGREEMENT FORESTS			
Total			
No.	Area	No.	Area
105	533,169.0	60	1,090.0
97	544,002.0	60	1,096.6
105	541,983.0	58	1,013.0
103	543,119.0	58	1,109.0
104	536,554.0	58	1,108.0

STATUS OF FOREST MANAGEMENT PLANS, MARCH 31, 1984

Areas in square kilometres

	Forest Management Units						Agreement Forests	
	Crown		Company		FMA			
	No.	Area	No.	Area	No.	Area	No.	Area
Approved Mgmt. Plans	33	102,264	5	64,097	6	53,105	34	588
Forest Mgmt. Plans submitted for review and approval	23	90,878	6	61,485	2	8,656	-	-
Forest Mgmt. Plans being prepared	8	23,747	1	879	9	27,210	24	520
Plans are req'd (Inactive)	11	101,810	-	-	-	-	-	-
Unalienated Crown Lands	-	2,423	-	-	-	-	-	-
Total	75	321,122	12	126,461	17	88,971	58	1,108

TIMBER LICENCES under the Crown Timber Act

Areas in square kilometres at March 31

Year	Under Section 2		Under Section 3		Under Section 5		Under Section 6		Total Licences	
	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
1980	78	75.6	412	242,711.9	20	86.5	-	-	510	242,874.1
1981	56	69.4	423	198,334.8	64	329.7	5	45,583.8	548	244,317.7
1982	34	48.0	412	181,297.1	58	643.0	8	61,788.8	512	243,776.9
1983	26	32.3	415	178,967.1	52	545.6	13	79,627.8	506	259,172.8
1984	34	37.4	442	159,133.5	29	407.9	17	88,998.9	522	248,577.7

MILL LICENCES

Type of Mill	1979	1980	1981	1982	1983
Saw Mills, 8-hour capacity					
Lumber....over 50M fbm	54	60	60	59	58
Lumber....10M to 50M fbm	96	96	85	87	88
Lumber....under 10M fbm	594	648	608	593	613
Misc. Sawn Products.....	41	38	50	68	44
Saw Mills, Total.....	785	842	803	807	803
Veneer Mills.....	28	31	25	26	25
Pulp Mills.....	23	21	21	21	20
Total.....	836	894	849	854	848

TIMBER HARVESTED ON CROWN LANDS BY SPECIES

In cubic metres and $000s in years ending March 31

Species	1980	1981	1982	1983	1984
SOFTWOOD					
Balsam	662,803	926,677	718,975	586,883	638,428
Cedar	22,886	13,972	13,659	17,195	18,667
Hemlock	64,167	59,109	63,504	47,361	65,111
Jack Pine	6,207,462	5,927,897	5,362,713	4,135,200	5,182,626
Red Pine	192,051	187,494	183,663	168,759	193,575
White Pine	607,311	495,271	529,159	563,024	754,044
Spruce	8,901,496	8,692,652	7,724,772	6,707,133	8,423,622
Tamarack	4,622	5,658	2,330	1,168	2,740
Mixed	9,970	10,017	18,503	30,599	20,691
HARDWOOD					
Ash	2,494	1,519	2,021	1,558	1,516
Basswood	13,897	9,069	11,042	7,769	8,544
Beech	23,453	15,737	19,581	18,377	17,999
White Birch	96,526	62,557	77,523	93,562	83,668
Yellow Birch	121,990	90,478	105,982	78,058	94,616
Butternut	14	16	16	36	21
Cherry	1,243	634	1,373	1,584	2,046
Elm	306	111	39	165	35
Ironwood	1	-	1	1	2
Maple	270,417	178,833	219,345	164,317	204,384
Oak	14,362	10,845	11,389	10,415	14,190
Poplar	1,509,922	1,414,955	1,800,431	1,505,038	2,243,088
Mixed	677,854	633,769	647,366	648,316	743,663
TOTALS					
Softwoods	16,672,766	16,318,746	14,617,179	12,257,322	15,299,504
Hardwoods	2,732,479	2,418,525	2,896,121	2,529,198	3,413,771
Total	19,405,245	18,737,271	17,513,300	14,786,521	18,713,275
Value	$46,184	$43,727	$42,453	$35,037	$47,151

VOLUME AND VALUE OF TIMBER CUT FROM CROWN LANDS

in year ending March 31, 1984

Tree Species	Volume in Cubic Metres	Bonus $	Crown Dues $	Stumpage Value $
SOFTWOODS				
White Pine	754,043.748	813,532.88	1,908,021.46	2,721,554.34
Red Pine	193,575.168	206,377.49	505,475.79	711,853.28
Jack Pine	5,182,625.544	579,575.92	13,838,095.62	14,417,671.54
White Spruce	108,425.289	5,048.81	299,632.64	304,681.45
Black Spruce	694,681.482	30,391.49	1,924,792.41	1,955,183.90
Spruce, Mixed	7,620,515.316	1,015,264.77	20,477,435.52	21,492,700.29
Hemlock	65,111.018	22,496.28	172,745.60	195,241.88
Balsam	638,427.935	90,932.80	1,601,764.55	1,692,697.35
Cedar	18,667.324	7,879.63	42,206.91	50,086.54
Tamarack	2,740.006	261.63	6,490.23	6,751.86
Conifers, Mixed	20,691.448	3,580.99	11,297.45	14,878.44
Total Softwoods	15,299,504.278	2,775,342.69	40,787,958.18	43,563,300.87
HARDWOODS				
Maple	204,383.871	186,199.00	518,575.79	704,774.79
Yellow Birch	94,616.106	161,744.23	276,636.39	438,380.62
White Birch	83,668.153	49,550.94	43,769.71	93,320.65
Oak	14,189.960	20,529.79	30,142.79	50,672.58
Beech	17,998.684	13,150.42	40,784.83	53,935.25
Ash	1,516.181	1,810.66	3,251.25	5,061.91
Elm	34.516	30.52	119.84	150.36
Basswood	8,543.787	16,950.81	18,476.01	35,426.82
Butternut	20.546	248.15	55.57	303.72
Ironwood	1.670	-	0.91	0.91
Cherry	2,046.458	946.60	4,595.70	5,542.30
Poplar	2,243,087.703	291,064.98	1,215,875.96	1,506,940.94
Hardwoods, Mixed	743,663.094	306,880.01	386,772.45	693,652.46
Total Hardwoods	3,413,770.729	1,049,106.11	2,539,057.20	3,588,163.31
GRAND TOTAL	18,713,275.007	3,824,448.80	43,327,015.38	47,151,464.18

TIMBER HARVESTED ON CROWN LANDS BY METHOD OF MEASUREMENT

in cubic metres and $000s in years ending March 31

Year	Stacked		Cubic	
	Softwood	Hardwood	Softwood	Hardwood
1979	4,291,932	755,807	6,346,902	579,123
1980	4,698,427	770,447	6,559,707	715,644
1981	4,380,421	723,064	6,339,098	513,585
1982	3,889,894	558,760	5,070,186	611,389
1983	2,974,245	650,425	4,313,754	525,436
1984	3,192,571	499,699	5,354,306	903,933

Year	Foot Board Measure			Mass	Total	Stumpage Value
	Grade 1	Grade 2	Grade 3			
1979	135,462	218,731	114,054	5,323,371	17,765,383	$35,986
1980	131,394	207,162	109,406	6,213,058	19,405,245	$46,184
1981	90,064	144,986	70,785	6,475,267	18,737,271	$43,727
1982	107,244	181,592	81,943	6,719,923	17,513,300	$42,453
1983	79,545	131,481	71,228	6,040,406	14,786,521	$35,037
1984	104,431	157,403	81,517	8,419,414	18,713,275	$47,151

TIMBER HARVESTED ON CROWN LANDS BY REGION

Administrative Regions of Ministry of Natural Resources
in cubic metres in years ending March 31

Region	1980	1981	1982	1983	1984
Northwestern					
Softwoods	3,920,143	3,925,760	3,688,116	2,888,440	3,830,981
Hardwoods	42,118	55,195	71,194	76,868	90,337
North Central					
Softwoods	5,639,882	5,138,761	4,464,605	4,007,835	4,368,590
Hardwoods	914,377	859,906	923,375	847,995	1,133,546
Northern					
Softwoods	5,580,101	5,576,718	4,795,869	3,945,635	5,200,631
Hardwoods	451,595	432,151	538,589	533,394	781,957
Northeastern					
Softwoods	1,112,628	1,181,886	1,315,205	1,093,690	1,517,671
Hardwoods	652,473	552,629	766,063	523,773	703,510
Algonquin					
Softwoods	378,349	477,330	324,081	294,264	363,038
Hardwoods	579,706	436,581	492,500	442,689	606,772
Eastern					
Softwoods	41,469	18,291	29,304	22,852	18,595
Hardwoods	91,509	82,063	104,400	104,479	97,649
Central					
Softwoods	194	-	-	4,607	-
Hardwoods	701	-	-	-	-
Southwestern					
Softwoods	-	-	-	-	-
Hardwoods	-	-	-	-	-
Totals, Ontario					
Softwoods	16,672,766	16,318,746	14,617,179	12,257,322	15,299,504
Hardwoods	2,732,479	2,418,525	2,896,121	2,529,198	3,413,771
Grand Total	19,405,245	18,737,271	17,513,300	14,786,521	18,713,275

TIMBER HARVESTED ON CROWN LANDS BY METHOD OF MEASUREMENT AND TREE SPECIES

in year ending March 31, 1984

Unit of Measurement Tree Species	Billing Units	Equivalent Cubic Metres	Crown Dues $	Stumpage Value $
STACKED, ROUGH				
White Pine	11,609.983	11,609.983	27,462.81	28,306.83
Red Pine	4,890.154	4,890.154	11,298.59	11,469.49
Jack Pine	1,079,475.375	1,079,441.277	2,846,049.12	2,915,697.55
Black Spruce	98.816	98.816	196.84	248.21
Spruce, Mixed	1,358,103.652	1,355,496.659	3,614,998.70	3,721,135.19
Hemlock	421.825	421.825	1,062.45	1,143.44
Balsam	50,819.489	50,819.489	115,902.14	128,777.89
Cedar	2,507.044	2,506.864	5,308.95	5,793.12
Tamarack	637.894	637.894	1,194.24	1,233.86
White Birch	18,636.069	18,636.069	10,086.09	20,747.14
Poplar	336,390.871	335,993.963	179,616.68	214,280.81
Hardwoods, Mixed	281.298	281.298	153.03	878.85
SUB-TOTAL	2,863,872.470	2,860,834.291	6,813,329.64	7,049,712.38
STACKED, PEELED				
Jack Pine	135,628.875	135,628.875	374,475.56	383,539.76
Spruce, Mixed	440,736.812	440,736.812	1,218,884.18	1,249,767.92
Balsam	91,875.365	91,875.365	215,445.55	221,260.16
Poplar	72,521.441	72,521.441	39,732.44	42,778.04
SUB-TOTAL	740,762.493	740,762.493	1,848,537.73	1,897,345.88

Unit of Measurement Tree Species	Billing Units	Equivalent Cubic Metres	Crown Dues $	Stumpage Value $
CUBIC METRES				
White Pine	541,498.891	541,498.891	1,343,374.14	1,934,617.63
Red Pine	108,206.828	108,206.828	277,795.58	412,977.35
Jack Pine	989,023.693	989,405.989	2,640,230.89	2,759,426.02
White Spruce	108,425.289	108,425.289	299,632.64	304,681.45
Black Spruce	694,582.666	694,582.666	1,924,595.57	1,954,935.69
Spruce, Mixed	2,650,238.605	2,650,238.605	7,147,239.15	7,572,606.57
Hemlock	44,726.567	44,726.567	117,741.11	131,859.14
Balsam	196,671.120	196,671.120	472,759.17	500,062.00
Cedar	16,160.460	16,160.460	36,897.96	44,293.42
Tamarack	2,102.112	2,102.112	5,295.99	5,518.00
White Birch	64,942.438	64,942.438	33,638.23	72,528.12
Poplar	641,794.935	641,794.935	342,720.93	427,779.89
Hardwoods, Mixed	2.113	2.113	5.32	5.32
SUB-TOTAL	6,058,375.717	6,058,758.013	14,641,926.68	16,121,290.60
BOARD FOOT MEASURE, GRADE 1				
Maple	11,176.360	60,388.555	282,239.16	373,583.96
Yellow Birch	6,937.580	32,964.307	161,841.65	234,965.90
Oak	573.240	3,752.735	17,110.38	27,482.68
Beech	730.560	4,288.602	19,774.08	25,438.60
Ash	57.490	358.426	1,632.74	2,355.10
Elm	3.280	15.011	76.96	92.81
Basswood	333.450	2,252.853	10,089.27	16,615.65
Butternut	1.530	7.222	34.18	140.13
Cherry	78.960	403.214	1,892.90	2,183.86
SUB-TOTAL	19,892.450	104,430.925	494,691.32	682,858.69

Unit of Measurement Tree Species	Billing Units	Equivalent Cubic Metres	Crown Dues $	Stumpage Value $
BOARD FOOT MEASURE, GRADE 2				
Maple	17,549.930	93,930.105	215,509.50	296,202.80
Yellow Birch	9,248.320	45,268.896	107,666.15	194,780.89
Oak	777.480	4,995.483	10,840.45	18,540.61
Beech	1,470.570	8,203.524	18,670.74	24,337.81
Ash	99.860	625.837	1,393.70	2,172.78
Elm	3.430	16.854	41.74	56.23
Basswood	481.480	3,256.037	7,164.10	14,079.39
Butternut	1.680	8.390	19.27	156.15
Ironwood	0.030	0.149	0.35	0.35
Cherry	208.310	1,098.208	2,485.34	3,065.11
SUB-TOTAL	29,841.090	157,403.483	363,791.34	553,392.12
BOARD FOOT MEASURE, GRADE 3				
Maple	8,339.450	50,065.211	20,827.13	34,988.03
Yellow Birch	3,060.200	16,382.903	7,128.59	8,633.83
Oak	786.690	5,441.742	2,191.96	4,649.29
Beech	960.530	5,506.558	2,340.01	4,158.84
Ash	72.760	531.918	224.81	534.03
Elm	0.470	2.651	1.14	1.32
Basswood	370.680	3,034.897	1,222.64	4,731.78
Butternut	0.890	4.934	2.12	7.44
Ironwood	0.240	1.521	0.56	0.56
Cherry	89.140	545.036	217.46	293.33
SUB-TOTAL	13,681.050	81,517.371	34,156.42	57,998.45

Units of Measurement Tree Species	Billing Units	Equivalent Cubic Metres	Crown Dues $	Stumpage Value $
MASS-SCALED WOOD				
White Pine	164,967.801	200,934.874	537,184.51	758,629.88
Red Pine	68,084.551	80,478.186	216,381.62	287,406.44
Jack Pine	2,406,337.703	2,978,149.403	7,977,340.05	8,359,008.21
Spruce, Mixed	2,440,849.615	3,174,039.972	8,496,311.83	8,949,188.95
Hemlock	18,533.726	19,962.626	53,942.04	62,239.30
Balsam	274,918.797	299,061.961	797,657.69	842,597.30
Poplar	1,182,075.654	1,192,777.364	653,805.91	822,102.20
Hardwoods, Mixed	521,116.343	465,282.387	242,005.13	379,871.36
SUB-TOTAL	7,076,884.190	8,410,686.773	18,974,628.78	20,461,043.64
FUELWOOD, STACKED, CUBIC METRES				
Conifers, Mixed	18,407.315	18,407.315	10,135.69	10,519.78
Hardwoods, Mixed	72,874.298	72,226.405	39,304.21	96,117.69
SUB-TOTAL	91,281.613	90,673.720	49,439.90	106,637.47
FUELWOOD, CUBIC METRES				
Conifers, Mixed	2,284.133	2,284.133	1,161.76	4,358.66
Spruce, Mixed	3.268	3.268	1.66	1.66
White Birch	89.646	89.646	45.39	45.39
Hardwoods, Mixed	197,104.103	197,104.103	100,771.82	210,995.52
SUB-TOTAL	199,481.150	199,481.150	101,980.63	215,401.23
FUELWOOD, MASS-SCALED				
Hardwoods, Mixed	9,760.356	8,726.788	4,532.94	5,783.72
SUB-TOTAL	9,760.356	8,726.788	4,532.94	5,783.72
TOTAL TIMBER CUT IN PROVINCE		18,713,275.007	43,327,015.38	47,151,464.18

Number of District Cutting Licences/Permits issued and included in the above: 2,619

PRINCIPAL STATISTICS OF ONTARIO'S FOREST INDUSTRY BY SECTOR

Source: Statistics Canada

Sector	Establishments Number	Total Employees Number	Total Salaries & Wages $000s	Fuel and Electricity $000s
1978				
Logging	255	9,569	179,797	15,045
Wood Industries	707	21,942	279,260	27,712
Paper and Allied	319	45,209	747,394	228,829
Total	1,281	76,720	1,206,630	271,586
Furniture and Fixtures	527	20,968	250,535	8,299
1979				
Logging	321	9,684	197,276	17,084
Wood Industries	761	22,902	320,144	31,134
Paper and Allied	334	46,172	827,101	252,576
Total	1,416	78,758	1,344,521	300,794
Furniture and Fixtures	618	23,650	307,672	9,856
1980				
Logging	391	9,578	215,652	24,072
Wood Industries	778	21,348	328,793	33,475
Paper & Allied	349	47,861	926,779	279,530
Total	1,518	78,787	1,471,224	337,077
Furniture and Fixtures	607	23,703	340,550	11,254
1981				
Logging	418	9,003	230,052	30,562
Wood Industries	774	20,970	362,998	43,705
Paper & Allied	342	47,381	1,044,810	324,780
Total	1,534	77,354	1,637,860	399,047
Furniture and Fixtures	610	25,856	416,922	15,181
1982				
Logging	418	7,079	193,796	33,320
Wood Industries	794	19,015	334,260	46,144
Paper & Allied	347	43,917	1,078,919	351,385
Total	1,559	70,011	1,606,975	430,849
Furniture and Fixtures	644	23,684	398,558	19,285

Sector	Materials & Supplies $000s	Value of Shipments $000s	Total Value Added $000s
1978			
Logging	244,909	504,960	253,658
Wood Industries	541,657	1,077,962	515,321
Paper and Allied	1,616,288	3,145,697	1,317,821
Total	2,402,854	4,728,619	2,086,800
Furniture and Fixtures	390,909	828,564	437,325
1979			
Logging	306,121	588,598	278,921
Wood Industries	690,807	1,319,647	629,169
Paper and Allied	2,007,803	3,872,205	1,661,591
Total	3,004,731	5,780,450	2,569,681
Furniture and Fixtures	503,463	1,043,909	547,979
1980			
Logging	365,267	668,003	319,883
Wood Industries	712,130	1,275,892	562,631
Paper and Allied	2,368,722	4,598,977	1,992,117
Total	3,446,119	6,542,872	2,874,631
Furniture and Fixtures	606,934	1,224,628	615,070
1981			
Logging	381,431	717,927	327,515
Wood Industries	791,939	1,436,082	619,138
Paper and Allied	2,702,821	5,129,829	2,136,084
Total	3,876,191	7,283,838	3,082,737
Furniture and Fixtures	718,103	1,455,964	755,591
1982			
Logging	346,243	678,892	287,982
Wood Industries	678,066	1,256,366	525,522
Paper & Allied	2,596,915	4,841,076	1,939,371
Total	3,621,224	6,776,334	2,752,875
Furniture and Fixtures	646,963	1,347,435	682,402

Note:
Furniture and Fixtures does not include furniture upholstery, re-upholstery and repair shops.

MINERAL RESOURCES GROUP*

Room W-6341, Main Office Telephone: (416) 965-4271

Executive Co-ordinator.....	J. E. Finlay.....	W-6341.....4271
Secretary.....	Ms. P. Barchuk.....	W-6341.....4271
Communications Planner.....	E. B. Freeman.....	W-4642.....3127

ONTARIO GEOLOGICAL SURVEY

Room 1121, 77 Grenville St., Toronto, Ont. M5S 1B3 Telephone: (416) 965-1283

Director.....	Dr. V. G. Milne.....	R-1121.....1283
Executive Officer.....	G. Fromhold-Treu.....	R-1118.....1283
Regional Liaison Geologist.....	C. R. Kustra.....	R-1119.....5180
Geoscience Research Grant Program	R. B. Watson.....	R-1124.....1546
Exploration Technology Dev. Fund.	R. B. Watson.....	R-1125.....1546
Precambrian Geology Section.....	J. Wood, Chief.....	R-916.....1321
North Archean Group.....	H. Wallace.....	R-901.....1827
Central Archean Group.....	Dr. P. C. Thurston.....	R-924.....1827
South Archean Group.....	N. F. Trowell.....	R-907.....4817
Proterozoic Group.....	Dr. B. O. Dressler.....	R-903.....2326
Engineering & Terrain Geology Section.....	Dr. O. L. White, Chief..	R-707.....1182
Paleozoic & Mesozoic Subsection	Dr. P. G. Telford.....	R-706.....1183
Hydrocarbon Energy Res. Program	Dr. P. G. Telford.....	R-706.....1183
Quaternary Geology Subsection..	E. V. Sado.....	R-705.....1183
Aggregate Assessment Office....	S. Szoke.....	M1B-45.....1663
Geophysics/Geochemistry Section	R. B. Barlow, Chief.....	R-708.....1697
Mineral Deposits Section.....	Dr. A. C. Colvine, Chief	R-1026.....4261
Geoservices Section.....	G. E. Soucie, Chief.....	R-915.....5601
Geoscience Data Centre.....	H. A. Groen.....	R-804.....4641
Assessment Files Research.....	R. C. Owen.....	R-819.....6139
Geoscience Information.....	T. Soobrian.....	R-807.....0190
Scientific Review.....	Mrs. G. M. Scott.....	R-718.....7325
Geoscience Laboratories.....	Dr. C. Riddle.....	R-1117.....1337
Mines Library.....	Mrs. N. Thurston.....	R-812.....1352

*See Mining Lands and Prospecting Activities under Lands Administration Branch.

LIST OF FIELD SURVEYS (REGULAR PROGRAM)

Ontario Geological Survey 1983

No.	Location	Leaders
	PRECAMBRIAN GEOLOGY SECTION	
1.	Kenora-Cedar Lake Studies	G. P. Beakhouse
2.	Long Bay Area, Kenora District	G. W. Johns
3.	Dryden Pegmatite Field Mineralization	F. W. Breaks
4.	Sturgeon Lake Gold Area	P. C. Thurston
5.	Lakehead-Atikokan Compilation Map	P. C. Thurston
6.	McComber and Vincent Townships	M. W. Carter
7.	Hemlo-Heron Bay Area, Thunder Bay and Algoma Districts.	T. L. Muir
8.	White Lake Area, Thunder Bay District	G. M. Siragusa
9.	Josephine Area, Algoma District	R. P. Sage
10.	Batchawana Synoptic Project	E. C. Grunsky
11.	Kirkland Lake-Larder Lake Synoptic Project	L. S. Jensen
12.	Englehart Synoptic Project	L. S. Jensen
13.	Blezard Township	J. M. Martins
14.	Kinmount Area, Haliburton, Peterborough & Victoria Counties	R. M. Easton
15.	Northern Bancroft-Southern Barry's Bay Area	R. H. Thivierge
16.	Sunday Lake Area and Ardoch-Dalhousie Lake-Lavant Area	Liba Pauk
	ENGINEERING AND TERRAIN GEOLOGY PROGRAMS	
17.	Long Point-Port Burwell Area	P. J. Barnett
18.	Algonquin Park, Central Area	M. J. Ford
19.	Algonquin Park, Southwest Area and Kawagama Lake Area	R. S. Geddes
20.	Paleozoic Outliers on the Canadian Shield	D. J. Russell
21.	Aggregate Resources Inventory	D. W. Scott
	GEOPHYSICS/GEOCHEMISTRY PROGRAMS	
22.	Night Hawk Geophysical Test Range Results	D. H. Pitcher
23.	Lake Collection Methodology for Geochemical Samples, Wawa Area	J. A. C. Fortescue
24.	Presentation of Regional Geochemical Data, Southwest Ontario	J. A. C. Fortescue
25.	Geochemistry and Mineralogy of Basal Tills, Kirkland Lake Area	J. A. C. Fortescue
26.	Geochemical and Quaternary Geology Study, Hemlo Area	J. A. C. Fortescue
27.	Acid Lakes Study, Sudbury District	J. A. C. Fortescue
28.	Study of Long Cores from Six Lakes, Wawa-Sudbury Area	J. A. C. Fortescue

MINERAL DEPOSIT PROGRAMS

29. Macassa Mine, Kirkland Lake.....	M. E. Cherry
30. Kirkland Lake-Larder Lake Break, Central McGarry Township.....	J. V. Hamilton
31. Coniaurum Mine, Tisdale Township.....	D. W. Piroshco
32. Tungsten Mineralization: Hollinger-McIntyre Veins Timmins.....	P. C. Wood
33. Geraldton Gold Camp Re-appraisal.....	A. J. Macdonald
34. Archean Volcanic-Hosted Gold Deposits, Red Lake Area....	A. J. Andrews
35. Flat Lake-Howey Bay Deformation Zone, Red Lake Area.....	M. E. Durocher
36. Pipestone Bay-St. Paul Bay Deformation Zone, Red Lake Area.....	M. E. Durocher
37. West Carbonate Zone Cochenour Willans Gold Mine, Red Lake.....	Mary Sanborn
38. Age-dating Applications to Gold Mineralization.....	Soussan Marmont
39. Hemlo Area, Thunder Bay and Algoma Districts.....	G. C. Patterson
40. Gold Deposits, Lake of the Woods Area.....	J. C. Davies
41. Granitoid-Associated Mineralization, Dryden Area.....	M. E. Cherry
42. McLean Lake Area, Banting Township.....	L. Owsiacki
43. Elliot Lake Group Placer Gold Potential, Sudbury Area...	D. G. F. Long
44. Naturally Sorted Sand Sized Materials, Southwestern Ontario.....	Janet Springer
45. Asbestos Fibre Substitutes from Everyday Raw Materials..	Janet Springer
46. Precambrian Dolomite as Refractory Raw Material.....	Janet Springer

LIST OF FIELD SURVEYS (SPECIAL PROGRAM)

Ontario Geological Survey 1983

No.	Location	Leaders
	PRECAMBRIAN GEOLOGY PROGRAMS	
1.	Lumby Lake Area (western half)	M. C. Jackson
2.	Mishewawa Lake Area, Algoma District	N. W. D. Massey
3.	Black River-Matheson Area, Cochrane District	N. F. Trowell
	ENGINEERING AND TERRAIN GEOLOGY PROGRAMS	
4.	Matheson and Lightning River Areas, Cochrane District	U. J. Vagners
5.	Ottawa-St. Lawrence Lowland, Paleozoic Geology	D. A. Williams
6.	Peatland Inventory Project	J. L. Riley
7.	Oil Shale Assessment Project	M. D. Johnson
8.	Lignite Assessment Project	P. G. Telford
9.	Stratigraphic Drilling, Moose River Basin	P. G. Telford
	GEOPHYSICS/GEOCHEMISTRY PROGRAMS	
10.	Aeromagnetic Gradiometry, Test Surveys and Developments	R. B. Barlow
11.	Mineral Resource Appraisal and Geochemical Survey Batchawana Mtn. Area	J. A. C. Fortescue
	MINERAL DEPOSITS PROGRAMS	
12.	Geraldton Area, Gold Deposits Study	M. J. Lavigne Jr.
13.	Beardmore-Geraldton Area, Structural Studies	M. M. Kehlenbeck
14.	Beardmore-Geraldton Area, Banded Iron Formation Study	P. W. Fralick
15.	Dome and McDonough Townships, Structural Studies	P. Berger
16.	Gold Deposits, Lake of the Woods Area	J. C. Davies
17.	Quartz-Clast Conglomerate Gold Study, Elliot Lake-Sault Ste. Marie Area	W. Meyer
18.	Tudor, Madoc and Elzevir Townships, Talc Study	E. P. Dillon
19.	Gold-Arsenopyrite-Quartz Veins of the Flinton Group	E. P. Dillon
20.	Eastern Ontario Gold Occurrences Study	P. S. Barron
21.	Eastern Ontario Flake Muscovite Potential	C. P. Verschuren

GEOSCIENCE RESEARCH GRANT PROGRAM

Summary of projects and allocations in years ending March 31

	1980	1981	1982	1983	1984
Universities	Projects	Projects	Projects	Projects	Projects
Brock.....	-	1	2	1	1
Carleton.....	3	2	1	2	2
Guelph.....	-	-	-	-	-
Lakehead.....	-	1	-	-	-
Laurentian.....	2	3	1	-	-
McMaster.....	1	1	1	1	1
Ottawa.....	2	-	-	-	-
Queen's.....	2	3	1	3	3
Toronto.....	8	10	8	9	9
Waterloo.....	2	2	2	3	3
Western.....	5	5	4	2	2
Windsor.....	2	1	1	1	1
York.....	-	-	-	1	1
Total.....	27	29	21	23	23
	$475,567	$536,447	$418,289	$500,000	$500,000

EXPLORATION TECHNOLOGY DEVELOPMENT FUND PROGRAM

Summary of projects and allocations in years ending March 31

Company	Projects Accepted	Projects Accepted	Projects Accepted
	1982	1983	1984
Aerodat Limited	-	-	1
Alpha NUCLEAR Company	1	1	-
Androtex Ltd	-	1	1
C.W. Archibald Limited	-	1	-
Barringer Magenta Limited	2	-	2
Crone Geophysics Limited	1	1	1
Dighem Limited	-	1	1
EDA Instruments Incorporated	1	-	-
Gem Systems Limited	1	1	-
Geonics Limited	-	-	1
Geotech Limited	1	1	1
G. F. Gleeson & Associates	-	-	1
Herz Industries Limited	-	1	-
Huntec ('70) Limited	-	1	1
IFG Company	-	-	1
Lamontagne Geophysics Limited	1	1	1
McPhar Instruments Corporation	-	1	1
Morris Magnetics	-	-	1
Nuclear Activation Services Limited	1	1	1
Paterson, Grant & Watson Limited	1	1	1
Phoenix Geophysics Limited	1	1	1
Ouestor Surveys Limited	2	2	1
RMS Instruments Limited	-	-	1
Scintrex Limited	1	1	?
Technical Services Laboratories Limited	1	-	-
X-Ray Assay Laboratories Limited	-	-	1
Accepted	15	17	22
Grants Paid	$520,000	$985,000	$894,267

PUBLICATIONS RELEASED

Ontario Geological Survey

Types of Publication	1978	1979	1980	1981	1982	1983
Preliminary Maps	200	183	205	134	143	53
Geoscience Data Inventory Folios	-	-	-	-	1	102
Colored Geology Maps	12	14	9	21	12	15
N. Ontario Engineering & Terrain Geology Maps	-	11	51	31	-	15
Geophysical/Geochemical Maps	253	426	34	77	36	1
Aggregate Resource Inventory Papers	-	1	21	19	18	8
Guidebooks	-	1	-	-	-	1
Mineral Deposit Circulars	1	2	-	4	1	-
Miscellaneous Papers	6	7	7	8	7	11
Non-Serial Publications	2	3	4	7	8	13
N. Ontario Engineering & Terrain Studies	-	-	42	24	-	10
Open File Reports	22	22	42	41	32	52
Reports	16	11	7	12	10	10
Studies	-	1	-	1	3	3

ASSESSMENT FILES RESEARCH OFFICE

Office Operations	1979	1980	1981	1982	1983	1946-83
FILES ADDED						
Technical Surveys and Summaries for Assessment Credit	350	453	821	860	1,279	9,977
MEAP	50	46	*35	-	-	518
OMEP	-	-	-	-	103	103
Ontario Securities Commissions & Misc.	77	150	75	72	67	1,331
Drilling Reports	340	310	388	361	204	9,984
Licence of Occupation	(a)	(a)	3	3	-	83
OPERATIONS						
Inquiries	2,182	2,577	2,567	2,214	2,907	-
Files Examined	15,640	17,696	17,769	14,603	21,757	-

* Program discontinued
(a) Uncertain of exact totals

Mineral Resources Group

MINERAL RESOURCES BRANCH

Room W-4626, Main Office Telephone (416) 965-1559

Branch Director.....	Dr. T. P. Mohide.....	W-4626...5-1559
Mineral Statistics Section.....	G. Weatherson, Spvr.....	W-4632...5-0211
Metallic Minerals Section.....	Dr. G. Anders, Spvr.....	W-4625...5-1311
Industrial Minerals Section.....	D. W. Scott, Spvr.....	W-4646...5-1172
Fuel Minerals Section.....	S. Keen, Spvr.....	W-4629...3-1882

ONTARIO MINERAL PRODUCTION IN 1982 AND 1983

1982 figures show final completion of shipments
1983 figures are preliminary

	Unit	1982 Quantity	1982 Value $	1983 Quantity	1983 Value $
METALLIC MINERALS					
Bismuth	kg	1,256	7,561	1,000	6,000
Cadmium	kg	549,006	1,823,036	834,000	2,551,000
Calcium	kg	329,139	2,567,284	399,000	3,306,000
Colbalt	kg	966,285	28,258,083	1,324,000	44,941,000
Copper	kg	157,848,757	298,008,470	197,036,000	412,140,000
Gold	g	20,136,843	306,786,475	21,620,000	362,574,000
Iron Ore	tonne	3,650,257	193,445,956	3,664,000	180,519,000
Lead	kg	5,696,833	3,815,768	4,786,000	4,007,000
Magnesium	kg	7,630,163	27,811,944	5,980,000	21,978,000
Nickel	kg	63,955,580	440,631,297	94,621,000	595,165,000
Platinum Gp.	kg	7,105	82,253,570	5,195	67,885,000
Selenium	kg	25,038	273,915	84,000	844,000
Silver	kg	346,974	118,679,990	347,000	157,026,000
Tellurium	kg	2,843	93,819	5,000	137,000
Tin	kg	19,375	368,266	6,000	104,000
Uranium (U)	kg	4,970,327	586,623,297	4,837,000	518,364,000
Zinc	kg	260,543,524	257,888,108	282,826,000	325,249,000
Total Value, Metallic			2,349,336,839		2,696,796,000

	Unit	1982 Quantity	1982 Value $	1983 Quantity	1983 Value $
NON-METALLICS					
Barite	tonne	6,000	1,300,000	N/A	1,000,000
Feldspar	tonne	N/A	N/A	N/A	46,000
Gemstone	kg	72,000	83,589	N/A	N/A
Gypsum	tonne	574,346	5,516,064	889,000	7,950,000
Magnetite	tonne	4,576	51,699	N/A	N/A
Nepheline Syenite	tonne	552,838	17,882,193	528,000	15,590,000
Peat	tonne	4,674	886,066	6,000	647,000
Quartz	tonne	264,907	7,758,937	645,000	12,265,000
Salt	tonne	5,461,190	93,200,162	5,059,000	93,180,000
Serpentine Filler	tonne	3,067	455,121	N/A	N/A
Soapstone Talc, Pyrophyllite	tonne	20,462	3,433,781	N/A	5,127,000
Sulphur in smelter gas	tonne	283,719	15,492,214	438,000	23,227,000
Sulphur Elemental	tonne	27,969	2,095,957	25,000	2,216,000
Terazzo Chips	tonne	1,694	110,692	N/A	N/A
Total Value, Non-Metallic			148,266,475		161,245,000
FUELS					
Natural Gas	000 cu.m.	436,354	41,360,466	448,000	48,556,000
Petroleum	000 cu.m.	85,637	14,761,230	85,000	16,552,000
Total Value, Fuels			56,121,696		65,108,000

	Unit	1982 Quantity	1982 Value $	1983 Quantity	1983 Value $
STRUCTURAL MATERIALS					
Clay Prod.	-	N/A	51,131,105	N/A	75,430,000
Cement	tonne	3,007,439	185,047,149	2,845,000	229,850,000
Lime	tonne	1,539,642	82,812,542	1,418,000	89,546,000
Sand & Gravel	tonne	53,567,884	116,552,053	54,000,000	123,000,000
Stone	tonne	28,487,598	110,784,867	28,000,000	117,000,000
Total Value Structural Materials			546,327,716		634,826,000
GRAND TOTAL FOR ONTARIO			3,100,052,726		3,557,975,000

DIRECT COSTS OF THE MINERAL INDUSTRY IN ONTARIO

Year	Total Employment	Wages & Salaries $	Fuel & Electricity $	Process Supplies $	Total Cost $
1975	44,329	568,817,097	154,748,157	375,688,838	1,099,254,092
1976	44,585	647,549,765	199,216,913	424,029,472	1,270,796,150
1977	43,782	688,435,301	224,263,043	429,950,598	1,342,648,942
1978	33,234	589,143,142	199,018,565	392,059,456	1,180,221,163
1979	33,860	675,471,862	245,536,846	447,427,618	1,368,436,326
1980	41,252	863,044,670	296,889,343	601,153,558	1,761,087,571
1981	41,522	982,665,625	349,709,968	673,489,373	2,005,864,966
1982*	38,277	948,599,962	306,710,300	494,342,597	1,749,652,859

*40,277 including 2,000 estimate of small sand & gravel and stone industries.

VALUE OF ONTARIO MINERAL OUTPUT BY MNR REGION

MNR Region	1980 $	1981 $	1982 $
Algonquin Region			
Metallic Minerals	54,697,685	57,453,827	43,254,750
Non-metallic Minerals	16,601,372	17,609,906	17,933,892
Structural Materials	10,069,196	7,492,080	6,718,196
Total	81,368,253	82,555,813	67,906,838
Central Region			
Non-metallic Minerals	5,753,434	6,051,925	5,042,818
Natural Gas, Petroleum	995,055	1,165,152	1,128,305
Structural Materials	284,761,165	310,159,188	267,295,017
Total	291,509,654	317,376,265	273,466,140
Eastern Region			
Metallic Minerals	-	-	-
Non-metallic Minerals	771,755	626,327	720,846
Structural Materials	95,298,546	110,245,387	93,413,196
Total	96,070,301	110,871,714	94,134,042
North Central Region			
Metallic Minerals	156,468,788	107,652,059	96,071,087
Non-metallic Minerals	698,156	822,162	1,147,061
Structural Materials	3,975,687	7,457,705	6,999,014
Total	161,142,631	115,931,926	104,217,162

Northern Region			
Metallic Minerals	747,565,752	663,110,786	587,232,675
Non-metallic Minerals	3,752,770	6,529,727	10,041,788
Structural Materials	4,501,871	3,819,641	5,113,479
Total	755,820,393	673,460,154	602,387,942
Northeastern Region			
Metallic Minerals	2,435,663,070	2,194,717,693	1,375,065,540
Non-metallic Minerals	17,737,296	22,278,600	16,104,557
Structural Materials	30,563,152	33,717,112	29,082,301
Total	2,483,963,518	2,250,713,405	1,420,252,398
Northwestern Region			
Metallic Minerals	414,769,590	296,700,224	247,712,787
Non-Metallic Minerals	885,049	884,781	666,134
Structural Materials	7,429,567	7,466,573	6,822,471
Total	423,084,206	305,051,578	255,201,392
Southwestern Region			
Natural Gas, Petroleum	42,273,550	44,503,163	54,993,391
Non-metallic Minerals	72,904,536	83,102,024	96,609,379
Structural Materials	143,629,290	147,306,189	130,884,042
Total	258,807,376	274,911,376	282,486,812
ONTARIO TOTAL	4,551,766,332	4,130,872,231	3,100,052,726

MINERAL RESOURCES GROUP

MINING TAXATION & OMEP OFFICE

Room W-4649, Main Office Telephone (416) 965-1062

Director and Mine Assessor.....	K. S. Rachamalla.....	W-4649.....1062
Assistant Mine Assessors.....	A. Cutrona.....	W-4654.....9955
	R. Gunther.....	W-4654.....9955
	J. Sheehan.....	W-4654.....9955
	A. Stoddart.....	W-4654.....9955
OMEP		
Administrator.....	F. W. Pooley.....	W-4650.....1062
Evaluator.....	R. B. Huggins.....	W-4641.....1062

MINING TAX

Summary of mining tax in years ending March 31

	1981 $ value millions	1982 $ value millions	1983 $ value millions	1984 $ value millions
Mining Tax Collected.....	160.5	55.4	26.2	31.9
Total value of mineral production assessed.....	2,550.0	1,720.9	2,530.0	940.9
Taxes payable per assessments...	44.5	88.9	96.2	37.2
Total additional tax, interest & penalty.....	1.1	2.2	12.1	1.6
Total refund of taxes (paid in advance).....	0.8	4.8	4.8	0.3
No. of assessments completed....	45	48	48	41

OMEP DESIGNATED PROGRAMS REGIONAL DISTRIBUTION

in years ending March 31

	No. of Programs			Total Expenditure ($ millon)			% of Total		
MNR Regions	1982	1983	1984	1982	1983	1984	1982	1983	1984
Northern.....	54	66	86	8.6	14.3	34.9	33.1	34.8	34.6
Northwestern.....	21	47	101	5.7	9.5	30.8	21.7	23.1	30.5
Northeastern.....	23	18	61	5.6	4.9	9.8	21.3	11.9	9.7
North Central.....	25	70	127	5.0	10.5	24.1	19.0	25.6	24.0
Algonquin & Eastern	14	12	11	1.3	1.9	1.3	4.9	4.6	1.2
Total	137	213	386	26.2	41.1	100.9	100.0	100.0	100.0

OMEP DESIGNATED PROGRAMS BY COMMODITIES

In years ending March 31

	Total Expenditure ($ million)				% of Total			
	1981	1982	1983	1984	1981	1982	1983	1984
Gold, Silver.....	29.3	20.3	34.8	94.8	86.3	77.6	84.7	94.0
Base Metals.....	1.2	1.6	1.4	2.4	3.5	6.2	3.4	2.4
Industrial Minerals..	3.0	4.2	2.8	0.1	9.0	16.0	6.8	0.1
Other (uranium, etc.)	.4	.1	2.1	3.6	1.2	.2	5.1	3.5
Total	33.9	26.2	41.1	100.9	100.0	100.0	100.0	100.0

DETAILS OF COMPLETED OMEP PROGRAMS: REGIONAL DISTRIBUTION

In years ending March 31

	No. of Programs		Total Expenses ($ million)		Eligible Expenses ($ million)		Grant/ Tax Credit ($ million)		% of Total	
	1983	1984	1983	1984	1983	1984	1983	1984	1983	1984
Northern.....	60	54	11.5	12.1	8.9	8.3	2.2	2.1	47.9	38.3
Northwestern.....	35	47	4.8	8.6	4.0	7.4	1.0	1.8	20.0	27.2
Northeastern.....	19	19	2.6	4.2	2.1	3.5	.5	.9	10.8	13.3
North Central.....	25	52	4.6	6.4	3.3	5.9	.8	1.5	19.2	20.2
Algonquin & Eastern	10	10	.5	.3	.4	.3	.1	.1	2.1	1.0
Total	149	182	24.0	31.6	18.7	25.4	4.6	6.4	100.0	100.0

DETAILS OF COMPLETED OMEP PROGRAMS: ECONOMIC BENEFITS

In years ending March 31

	1981	1982	1983	1984
EMPLOYMENT				
Number Employed.....	430	550	1,600	2,100
Work days.....	13,550	17,710	61,780	83,170
WAGES ($ million).....	$1.1	$1.7	$6.6	$8.1
GOODS & SERVICES ($ million)..	$5.0	$5.6	$17.4	$23.5
DIAMOND DRILLING (metres).....	50,450	37,400	133,550	142,690

OUTDOOR RECREATION GROUP

Room W-2340, Main Office Telephone (416) 965-5661

Executive Co-ordinator	T. J. Millard	W-2341...5-5661
Secretary	N. Ball	W-2340...5-5661
Enforcement Specialist	W. D. Gartley	W-2342...5-5661
Librarian	S. Louet	W-4540...5-6319
Provincial Parks Council		
Chairman	F. Gray	(416) 368-8305 Ex.2574

WILDLIFE BRANCH

Room W-2320, Main Office Telephone (416) 965-4252

Branch Director		W-2327.....4254
Wildlife Planning Co-ordinator	W. L. Sleeth	W-2307.....7641
Program Development & Audit Section	D. A. Hagan, Spvr.	W-2321.....4252
Habitat Development	D. M. Hogg	W-2309.....7641
Moose/Caribou Program	R. A. Stefanski	W-2331.....4252
Upland Game/Waterfowl Program	J. L. Harcus	W-2332.....4252
Deer/Bear Program	H. Smith	W-2323.....4252
Non-game Program	I.E. Bowman	W-2330.....4252
Wetland Habitat Co-ordination	V. A. Glooschenko	W-2322.....7641
Extension Development Section	L. Whistance-Smith, Spvr.	W-2326.....4252
Wildlife Information	H. D. Jenkins	W-2320.....4252
Wildlife Services Section	M. C. Smith, Spvr.	W-2328.....4252
Commercial Wildlife Program	M. Novak	W-2423.....3345
Hunter Education	W. M. McKittrick	W-2306.....7641
Legal Services	M. Chromec	W-2329.....4252
Data System	J. M. Barbowski	W-2304.....7641

Box 50, Maple, Ont. L0J 1E0 Telephone (416) 832-2761

Wildlife Research Section	C. D. MacInnes, Spvr.	Extension...241
Population Dynamics	D. J. Hussell	Extension...241
Bio-Electronic Scientist	Vacant	Extension...241
Field Studies Scientist	D. R. Voigt	Extension...241
Rabies Unit Leader	D. H. Johnston	Extension...241
Upland Game/Waterfowl Scientist	H. G. Lumsden	Extension...241
Predator Scientist	G. B. Kolenosky	Extension...241
Disease/Parasites Scientist	E. M. Addison	Extension...241

HUNTING STATISTICS - Estimates compiled from hunters surveyed by mail

Comparison between hunter numbers and licence sales gives an estimate of the number of licence holders who did not hunt

	RESIDENT			NON-RESIDENT		
Year	Hunters	Hunter Days	Harvest	Hunters	Hunter Days	Harvest
MOOSE						
1978	79,210	542,000	10,630	6,970	52,100	1,320
1979	70,770	529,400	10,110	7,220	54,600	1,580
1980	71,670	426,700	7,670	3,930	25,200	690
1981	66,850	405,500	7,630	3,110	19,400	460
1982	85,630	508,100	10,150	3,060	19,200	550
DEER						
1978	87,950	450,100	13,490	2,860	14,600	*480
1979	78,440	415,800	13,200	1,560	8,700	*370
1980	80,280	443,200	9,150	780	4,400	110
1981	84,590	469,500	10,610	590	3,000	70
1982	91,750	500,300	11,870	560	2,900	90
SMALL GAME **						
1974-75	225,840	3,299,000		7,380	52,100	
1976-77	242,310	3,388,000		8,530	62,300	
1978-79	226,693	2,975,400		8,724	55,100	
1979-80	214,550	2,829,600		10,520	65,700	
1980-81	220,020	2,781,300		11,170	76,100	

TOTALS

Year	Hunters	Hunter Days	Harvest
MOOSE			
1978	86,180	594,100	11,950
1979	77,990	584,000	11,690
1980	75,600	451,900	8,360
1981	69,960	429,900	8,090
1982	88,690	527,300	10,700
DEER			
1978	90,810	464,700	*13,970
1979	80,000	424,500	*13,570
1980	81,060	447,600	9,260
1981	85,180	472,500	10,680
1982	92,310	503,200	11,960

* Includes deer harvested on moose licences.
** Includes waterfowl.

EXPENDITURE BY HUNTERS - (Excluding Licence Fees)

Survey Year*	Hunt	Estimates compiled from Hunters Surveyed by Mail Resident	Non-Resident	Total
1976-77	Moose	17,821,000	3,192,000	21,013,000
1976-77	Deer	12,000,000	809,000	12,809,000
1976-77	Small Game	53,561,000	3,252,000	56,813,000
1978-79	Small Game	47,634,000	3,278,431	50,912,431
1979-80	Moose	22,833,000	3,803,000	26,636,000
1979-80	Deer	14,892,000	548,000	15,440,000
1979-80	Small Game	47,162,000	4,413,000	51,575,000
1980-81	Moose	21,334,000	2,302,000	23,636,000
1980-81	Deer	15,887,000	297,000	16,184,000
1980-81	Small Game	50,000,000	4,563,000	54,563,000
1981-82	Moose	23,576,000	1,929,000	25,505,000
1981-82	Deer	18,163,000	229,000	18,392,000
1982-83	Moose	28,900,000	1,889,000	30,789,000
1982-83	Deer	20,306,000	240,000	20,546,000

HUNTING LICENCES SOLD

Year	DEER Resident	DEER Non-Res.	MOOSE Resident	MOOSE Non-Res.	BEAR Resident	BEAR Non-Res.
1979-80	85,921	1,762	77,937	7,378	2,666	11,247
1980-81	87,985	823	79,688	4,011	9,064	11,682
1981-82	91,695	630	73,851	3,214	13,736	13,341
1982-83	101,712	570	92,393	3,111	13,817	14,639
1983-84	112,318	535	75,650	2,148	15,464	16,109

Year	SMALL GAME Resident	SMALL GAME Non-Res.	TOTAL Resident	TOTAL Non-Res.	Total
1979-80	353,077*	11,527	519,601	31,914	551,515
1980-81	383,091*	12,783	559,828	29,299	589,127
1981-82	368,770*	12,492	550,924	29,677	580,601
1982-83	349,481	11,202	557,403	29,522	586,925
1983-84	332,328	10,844	535,760	29,636	565,396

* Includes summer hunting tag.

FUR HARVESTS

in years ending June 30

Average Pelt value, 1980 $		Totals from Sealing Officers' Reports and Fur Dealers' Returns				
		1977	1978	1979	1980	1981
34.36	Beaver	136,856	147,556	170,644	209,135	181,383
30.20	Mink	14,856	20,557	21,704	27,377	29,944
26.63	Marten	20,768	38,878	52,169	45,861	45,305
60.87	Otter	7,835	8,592	9,943	11,112	10,952
141.55	Fisher	2,165	2,693	3,300	4,457	4,013
267.71	Lynx	1,151	1,722	1,873	2,485	2,361
126.37	Bobcat	24	16	30	33	21
7.48	Muskrat	435,290	433,163	526,890	605,966	554,894
29.67	Raccoon	44,223	93,178	105,263	116,249	108,164
1.35	Squirrel	5,817	4,180	7,645	16,922	15,836
.89	Weasel	3,576	3,685	5,694	6,100	7,187
71.29	Coloured Fox	10,131	15,979	19,282	18,854	15,548
29.79	Arctic Fox	101	199	164	176	163
89.33	Timber Wolf	285	431	381	342	748
54.47	Coyote	2,276	4,394	3,218	3,819	2,646
52.31	Black Bear	283	284	511	818	482
185.36	Wolverine	---	11	8	9	9
3.05	Skunk	98	210	453	662	438
45.17	Grey Fox	---	1	3	1	6
488.33	Polar Bear	17	24	21	20	27
Total Pelts		685,752	775,753	929,196	1,070,398	980,127
Total Value		7,998,708	11,284,007	20,234,367	24,407,054	18,965,648

TRAPPER LICENCES, 1981

Registered	3,123	@ $5 =	$15,615
Resident	9,991	@ $5 =	$49,955
Farmer, Indian Reservations	1,612	@ $0 =	---
Registered Treaty	3,315	@ $1 =	$ 3,315
Resident Treaty	25	@ $5 =	$ 125
Totals	18,071		$69,010
Raccoon Hunters	3,231	@ $5 =	$16,155

HUNTER EDUCATION PROGRAM

Training began in 1957. It became mandatory for new hunters in 1960, and for new hunters under the age of 20 years in 1968.

Year	ACTIVE INSTRUCTORS at Dec. 31	STUDENTS TRAINED Yearly	To Date	HUNTING ACCIDENTS Non-Fatal	Fatal	Total
1977	1,011	32,126	452,298	67	4	71
1978	879	38,500	490,798	60	8	68
1979	1,110	35,080	525,878	46	5	51
1980	1,320	38,730	564,608	56	6	62
1981	1,406	39,625	604,233	33	3	36

Total royalties collected in the 1980-81 season were $1,115,412.

29 PROVINCIAL WILDLIFE AREAS

	Hectares
Aylmer Provincial Wildlife Area	150
Brighton Provincial Wildlife Area	388
Bruce Recreation Area	3,925
Camden Lake Wildlife Management Area	1,052
Darlington Provincial Park	111
Fingal Provincial Wildlife Area	293
Gananoque Provincial Wildlife Area	580
Holiday Beach Provincial Park	198
Holland Marsh Provincial Wildlife Area	573
Hoople Creek Provincial Wildlife Area	105
Hullett Provincial Wildlife Area	2,794
Kolapore Uplands Recreational Area	4,209
Long Point Provincial Wildlife Area	500
Luther Marsh Wildlife Area	5,666
Matchedash Bay Provincial Wildlife Area	225
Mountain Provincial Wildlife Area	1,457
Nonquon River Wildlife Area	1,133
Point Petre Provincial Wildlife Area	1,276
Presqu'ile Provincial Park	931
Puslinch Crown Resource Management Area	138
Rankin Wildlife Management Area	3,800
Rondeau Provincial Park	4,654
St. Edmunds Provincial Wildlife Area	6,799
Scugog Island	182
Sibbald Point Provincial Park	225
Stag Island Wildlife Management Area	17
Tiny Marsh Provincial Wildlife Area	931
Wye Marsh Provincial Wildlife Area	919

13 WILDLIFE EXTENSION LANDOWNER AGREEMENT AREAS

	Hectare
Aylmer Ponds	43
Beverly Swamp	430
Binbrook	401
Calton Swamp	96
Christie	340
Crooks Hollow	17
Hawk Cliff	34
Lake St. Lawrence	6,070
Mud Lake	61
Orangeville Reservoir	316
Valens	223
Waterford Lakes	290
Willoughby Marsh	227

ENFORCEMENT STATISTICS 1983-84

District or Region	No. of Field Conservation Officers	No. of Deputy Conservation Officers	No. of Contacts by Conservation Officers	No. of F & W Warnings	No. of F & W Charges
Algonquin	29	74	32,395	1,924	759
Central	29	76	59,799	3,015	930
Eastern	42	40	47,550	852	811
Southwestern	29.5	56	38,665	2,506	1,064
North Central	21	21	35,492	1,158	717
Northeastern	34	34	48,736	1,263	957
Northern	26	35	31,279	933	756
Northwestern	25	15	51,112	1,429	906
Total	235.5	351	345,028	13,080	6,900

District or Region	No. of Other Charges	Total Amt. of F & W Fines	Total Amt. of Other Fines	Total Amt. of Fines
Algonquin	785	49,322	28,872	78,194
Central	916	85,126	49,530	134,476
Western	74	44,598	1,120	45,718
Southwestern	1,996	72,176	103,658	175,834
North Central	254	47,790	8,971	56,761
Northeastern	151	73,893	6,420	80,313
Northern	104	50,789	4,182	54,970
Northwestern	57	76,497	3,502	77,999
Total	4,337	500,191	206,255	704,266

District or Region	Total Number F & W Convictions	Total No. of Cases Pending	Total Other Convictions
Algonquin	742	17	700
Central	961	12	916
Eastern	740	16	243
Southwestern	822	135	1,278
North Central	478	18	202
Northeastern	883	-	145
Northern	666	3	70
Northwestern	817	64	-
Total	6,109	265	3,554

Outdoor Recreation Group

PARKS AND RECREATIONAL AREAS BRANCH

Room W-3329, Main Office Telephone (416) 965-5160

Branch Director	N. R. Richards	W-3329.....5160
Policy Co-ordinator	F. L. Bishop (actg)	W-3328.....2745
Secretary	Ms. S. D. Hellman	W-3328.....5160
Planning Manager	G. D. Boggs	W-3301.....3981
Planning Secretary	Mrs. E. Mason	W-3301.....3981
Sr. Planner, Parks & Heritage Res	M. Garscadden	W-3301.....3981
Recreational Areas Planner	R. Phillips	W-3301.....3981
Earth Sciences Planner	R. J. Davidson	W-3301.....3981
Life Sciences Planner	T. J. Beechey	W-3301.....3981
Operations Manager	E. E. Murphy	W-3342.....1245
Operations Secretary	Mrs. J. Miller	W-3340.....1245
Operations Stenographer	Ms. R. Coombs	W-3301.....1245
Parks Technician	B. Huis	W-3346.....1245
Park Operations Specialist	B. van Staalduinen	W-3343.....1245
Visitor Services Specialist	G. Forma (actg)	W-3347.....1245
Visitor Services Officer	Ms. S. MacFeeters	W-3348.....1245
Parks and Recreational Areas Technician	P. Mooradian	W-3345.....1245
Extension Specialist	F. Bishop	W-3329.....1245
Sr. Planner, Research	D. Hallman	W-3344.....1245
Planning Technician	R. Speck	W-3352.....1245
Mgmt. Information Specialist	D. Driscoll	W-3351.....1245
Mgmt. Information Clerk	Ms. D. Gluzdziecka	W-3353.....1245
Development Manager	K. G. McCleary	W-3326.....2745
Development Secretary	Mrs. G. Shaw	W-3326.....2745
Development Clerk	Ms. P. A. Naylor	W-3330.....2745
Development Typist	Mrs. R. Watkins	W-3320.....2745
Senior Landscape Architect	G. Pittenger	W-3330.....2745
Landscape Architect	J. Huang	W-3330.....2745
Development Engineer	R. H. Lockwood	W-3324.....2745
Design Engineer	I. Johnson	W-3322.....2745
Environmental Sanitation Co-ordinator	S. Cowan	W-3327.....2745
Draftsperson	Ms. M. Lehoczky	W-3330.....2745
Architectural Designer	H. Miles	W-3320.....2745
Sanitary Engineer	J. Kolodziej	W-3323.....2745
Electrical Designer	J. Konya	W-3320.....2745
Architectural Designer	A. Chappelle	W-3320.....2745
Mechanical Designer	G. Szepielewicz	W-3320.....2745

PUBLIC USE OF PROVINCIAL PARKS

Year	Interior Campers	Campers	Average Days	Camper Nights	Total of Visitors
1979	73,961	1,355,733	2.4	3,259,752	*5,161,563
1980	76,136	1,319,762	2.4	3,195,477	5,210,712
1981	74,199	1,321,494	2.5	3,283,299	**5,948,528
1982	80,550	1,267,974	2.6	3,287,603	6,250,777
1983	85,131	***1,354,019	2.7	****3,618,821	+7,647,287

VISITOR SERVICES PROGRAM ATTENDANCE

Organized Events/Activities

Year	Parks	Guided Tours	Personal Services Evening Programs	Film Programs	School Programs	Children's Programs	Special Events	Other
1982	67	30,604	82,693	60,131	22,328	14,105	76,618	81,515
1983	67	39,137	107,360	97,317	26,695	13,505	77,438	52,873

Indoor Facilities			Outdoor Self-Use Facilities			
Indoor Displays Museums	Activity Center	Other	Open Air Displays/ Exhibits	Interpretive Trails	Other Trails	Other
320,551	95,812	46,329	153,614	319,657	103,999	34,452
268,698	97,796	58,857	160,622	332,953	109,693	54,747

PUBLICATIONS

Priced	Other	Free
74,635	563	1,021,380
96,360	2,569	1,250,759

Total Visitor Services Program Attendance: ++1,442,408
1,497,691

GROWTH OF PROVINCIAL PARKS

areas in hectares

	Camping		Reserve Areas			Provincial Parks
Year	Parks	Units	No.	ha	No.	ha
1979	97	20,723	134	920,558	128	4,255,375
1980	97	20,723	101	949,726	131	4,257,266
			37	+++18,167		
1981	97	20,757	101	949,726	131	4,252,960
			37	18,167		
1982	97	20,393	97	944,337	133	4,258,632
			37	18,167		
1983	98	20,526	145	++++790,572	138	5,476,369

* Visitation calculated from permit sales only.
** Includes free day-use visitors.
*** Includes Interior Campers.
**** Includes Interior Camper Nights.
\+ Total visitation calculated from permit sales + free day-use visitation + interior visitation + includes traffic count visitation for Wasaga Beach Provincial Park.
++ Publications - not included.
+++ Any area acquired by MNR for recreational or other purposes but not intended for designation as a provincial park.
++++ Recommended provincial parks area.

138 PROVINCIAL PARKS IN REGULATION IN 1983

Region, District Provincial Park	Area in Hectares	Developed Campsites	Campers	Camper Nights
NORTHWESTERN REGION				
RED LAKE				
Opasquia	473,000	-	-	-
Pakwash	631	60	1,337	2,684
Woodland Caribou	450,000	-	-	-
KENORA				
Rushing River	190	192	18,730	45,864
Sioux Narrows	129	71	5,009	9,344
FORT FRANCES				
Caliper Lake	134	92	5,986	11,453
Lake of the Woods	1,097	100	4,489	11,955
DRYDEN				
Aaron	117	98	4,667	6,221
Blue Lake	354	188	17,694	35,443
SIOUX LOOKOUT				
Ojibway	2,630	50	3,052	4,859
IGNACE				
Sandbar Lake	3,157	75	5,958	9,264
Total, 11 Parks	931,439	926	66,922	137,087

NORTH CENTRAL REGION

Region, District Provincial Park	Area in Hectares	Developed Campsites	Campers	Camper Nights
ATIKOKAN				
Quetico (Dawson Trail)	475,819	133	4,314	9,001
Quetico Interior	-	-	18,248	112,161
THUNDER BAY				
Arrow Lake	40	-	-	-
Inwood	33	85	4,144	4,316
Kakabeka Falls	420	166	23,182	32,830
Middle Falls	4	25	1,807	2,044
Sibley	24,435	200	12,846	27,926
NIPIGON				
Lake Nipigon	1,458	85	3,090	4,606
Wabakimi	155,000	-	-	-
GERALDTON				
Klotz Lake	119	30	892	1,183
MacLeod	74	85	4,038	12,330
TERRACE BAY				
Neys	3,445	146	13,995	19,469
Rainbow Falls	575	225	13,811	17,698
Total, 12 Parks	661,422	1,180	100,367	243,564

Region, District Provincial Park	Area in Hectares	Developed Campsites	Campers	Camper Nights
NORTHERN REGION				
HEARST				
Fushimi Lake	5,294	45	3,540	12,783
Nagagamisis	8,131	165	3,101	12,039
MOOSONEE				
Polar Bear	2,408,700	-	-	-
Tidewater	980	30	1,111	1,111
KAPUSKASING				
Rene Brunelle	2,964	122	4,224	12,114
COCHRANE				
Greenwater	5,350	104	3,049	6,891
Kesagami	54,200	-	-	-
TIMMINS				
Kettle Lakes	1,261	165	7,727	25,151
KIRKLAND LAKE				
Esker Lakes	3,237	136	3,480	10,678
Kap-Kig-Iwan	292	64	3,140	5,482
CHAPLEAU				
Five Mile Lake	456	45	1,597	2,563
Ivanhoe Lake	1,589	149	5,170	13,618
Missinaibi Lake	44,061	36	1,875	7,576
The Shoals	11,198	46	2,237	4,873
Wakami Lake	8,806	65	2,772	11,860
Total, 15 Parks	2,556,519	1,172	43,023	126,739

Region, District Provincial Park	Area in Hectares	Developed Campsites	Campers	Camper Nights
NORTHEASTERN REGION				
WAWA				
Lake Superior	155,659	282	25,473	34,802
Lake Superior Interior	-	-	5,084	11,815
Michipicoten	289	-	-	-
Obatanga	9,409	132	9,067	14,621
White Lake	1,726	187	15,607	24,973
SAULT STE. MARIE				
Batchawana	169	-	-	-
Pancake Bay	466	338	25,912	43,720
BLIND RIVER				
Mississagi	2,883	100	3,209	9,384
ESPANOLA				
Chutes	108	130	15,856	21,937
SUDBURY				
Fairbank	105	160	6,647	19,737
Halfway Lake	4,730	215	14,768	45,954
Killarney	48,500	122	9,213	24,710
Killarney Interior	-	-	4,343	15,082
Mashkinonje	940	-	-	-
Windy Lake	118	83	4,078	11,971
TEMAGAMI				
Finlayson Point	37	114	5,147	14,089
Lady Evelyn Smoothwater	72,400	-	-	-
NORTH BAY				
Antoine	12	30	126	441
Marten River	400	216	8,274	22,038
Restoule	662	278	6,626	29,383
Samuel de Champlain	2,349	216	7,796	18,477
Total, 19 Parks	300,962	2,603	167,226	363,134

Region, District Provincial Park	Area in Hectares	Developed Campsites	Campers	Camper Nights
ALGONQUIN REGION				
PARRY SOUND				
Grundy Lake	2,554	520	18,447	54,910
Killbear	1,756	883	38,642	182,485
Oastler Lake	32	145	10,828	32,088
Sturgeon Bay	14	82	4,579	13,862
BRACEBRIDGE				
Arrowhead	963	389	29,989	72,008
Mikisew	131	265	12,675	28,694
BANCROFT				
Lake St. Peter	25	62	3,843	7,661
Petroglyphs	1,555	-	-	-
Silent Lake	844	167	11,399	26,742
ALGONQUIN PARK				
Algonquin	765,345	1,375	76,245	216,137
Algonquin Interior	-	-	56,552	185,474
Driftwood	265	77	4,371	8,061
PEMBROKE				
Bonnechere	113	113	4,892	17,630
Carson Lake	13	43	2,423	3,764
Total, 13 Parks	773,610	4,121	274,885	849,516

Region, District Provincial Park	Area in Hectares	Developed Campsites	Campers	Campers Nights
EASTERN REGION				
CARLETON PLACE				
Fitzroy	185	249	14,651	28,787
Murphys Point	1,240	182	10,183	25,355
Rideau River	98	185	12,523	22,676
Silver Lake	43	148	11,313	23,846
CORNWALL				
Carillon	1,417	416	15,699	36,307
South Nation	5	-	-	-
BROCKVILLE				
Charleston Lake	902	243	20,280	47,146
TWEED				
Bon Echo	6,644	530	28,703	97,542
Sharbot Lake	69	185	9,023	24,222
NAPANEE				
Ferris	198	163	4,039	7,730
Frontenac - Interior	5,130	40	904	1,740
Lake on the Mountain	104	-	-	-
North Beach	89	-	-	-
Presqu'ile	937	393	30,461	86,683
Sandbanks	1,507	411	34,368	113,233
Total, 15 Parks	18,568	3,145	192,147	515,267

Region, District Provincial Park	Area in Hectares	Developed Campsites	Campers	Camper Nights
CENTRAL REGION				
LINDSAY				
Balsam Lake	449	483	27,513	78,008
Darlington	209	350	28,677	57,856
Emily	83	299	17,827	51,756
Mark S. Burnham	39	-	-	-
Serpent Mounds	135	113	11,747	36,432
HURONIA				
Awenda	1,792	200	14,186	37,000
Bass Lake	39	92	11,858	27,624
Devil's Glen	6	45	2,813	4,246
Earl Rowe	312	555	27,100	68,538
Mara	45	106	6,597	20,542
McRae Point	138	205	12,830	39,011
Six Mile Lake	94	192	17,924	45,195
Springwater	47	-	-	-
Wasaga Beach	1,545	-	-	-
MAPLE				
Sibbald Point	226	648	34,958	97,932
CAMBRIDGE				
Bronte Creek	640	-	-	-
NIAGARA				
Rock Point	187	126	8,671	20,508
Total, 17 Parks	5,986	3,414	222,701	584,648

Region, District Provincial Park	Area in Hectares	Developed Campsites	Campers	Camper Nights
SOUTHWESTERN REGION				
Pakwash				
SIMCOE				
Long Point	141	270	19,681	71,135
Selkirk	73	145	6,010	20,175
Turkey Point	350	365	10,850	27,440
AYLMER				
Iroquois Beach	227	232	14,160	47,127
John E. Pearce	68	-	-	-
Port Bruce	5	-	-	-
CHATHAM				
Holiday Beach	92	46	3,394	8,411
Ipperwash	56	266	14,981	65,017
Peche Island	153	-	-	-
Pinery	2,542	1,080	93,089	249,679
Rondeau	4,816	226	18,728	55,556
Wheatley	241	210	14,176	33,372
WINGHAM				
Point Farms	308	199	15,955	41,416
OWEN SOUND				
Craigleith	66	172	18,888	40,458
Cyprus Lake	669	242	27,302	55,338
Fathom Five	9,976	-	-	-
Inverhuron	289	-	-	-
MacGregor Point	1,001	360	16,659	47,644
Sauble Falls	20	152	12,875	36,098
Total, 19 Parks	21,093	3,965	286,748	798,866
WATERWAY PARKS				
Chapleau-Nemegosenda River	8,159	(Chapleau)	-	-
Mattawa River	3,258	(North Bay)	-	-
Mississagi River	19,814	(Blind River,	-	-
		Espanola, Chapleau)	-	-
Winisk River	173,530	(Geraldton)	-	-
Total, 4 Parks	204,761	-	-	-

NATURE RESERVE PARKS				
Cavern Lake	189	(Thunder Bay)	-	-
East Sister Island	53	(Chatham)	-	-
Gibson River	168	(Huronia)	-	-
Limestone Island	450	(Parry Sound)	-	-
Matawatchan	65	(Pembroke)	-	-
Montreal River	44	(Sault Ste. Marie)	-	-
Ojibway Prairie	65	(Chatham)	-	-
Ouimet Canyon	777	(Thunder Bay)	-	-
Peter's Woods	34	(Lindsay)	-	-
Schreiber Channel	13	(Thunder Bay)	-	-
Porphyry Island	107	(Thunder Bay)	-	-
Trillium Woods	10	(Aylmer)	-	-
Waubaushene Beaches	34	(Huronia)	-	-
Total, 13 Parks	2,009	-	-	-
Total, 138 Parks	5,476,369	20,526	1,354,019	3,618,821

*145 RECOMMENDED PROVINCIAL PARKS - 1983
as per Backgrounder - District Land Use Guidelines

Region, District Recommended Provincial Parks	Area in Hectares
NORTHWESTERN REGION	
RED LAKE	
Pakwash Addition	2,070
Trout Lake	7,850
SIOUX LOOKOUT	
Albany River	65,360
Fawn River	4,700
Minnitaki Kames	4,340
Otoskwin - Attawapiskat River	72,890
Pipestone River North	53,250
Pipestone River South	25,720
Severn River	93,700
Windigo Point	380
KENORA	
Lake of the Woods Extension	9,920
FORT FRANCES	
Agassiz Peatlands (Blue Township)	1,600
Cranberry Lake (Gameland)	2,200
Spruce Island (Nelles Township)	800
Sable Island	1,800
Sandpoint Island	890
IGNACE	
Bonheur	710
Brightsand River	28,040
White Otter L. Turtle R.	29,100
DRYDEN	
Butler Lake	3,290
Gold Rock	710
Lola Lake	6,350
Winnange Lake	4,550
Total, 23 Parks	420,220

Region, District Recommended Provincial Parks	Area in Hectares
NORTH CENTRAL REGION	
NIPIGON	
Albert Lake Mesa	110
Kabitotikwia River	1,970
Kama Hill	1
Livingstone Point	1,600
Pantagruel Creek	2,200
Puff Island	2
Sedgman Lake	5,800
Shesheeb Bay	9
West Bay	1,140
Windigo Bay	8,300
THUNDER BAY	
Arrow Lake	450
Arrowhead Penninsula	490
Devon Road Mesa	90
Edward Island	530
Fraleigh Lake	870
Kaiashk	230
Kashabowie	2,060
Kopka River	11,000
La Verendrye River (Pigeon P. Clay Plain)	4,390
Little Greenwater Lake	220
Matawin River	2,650
Middle Falls Extension	970
Le Pate (Pie Island Mesa)	50
Silver Falls	2,410
Thompson Island	170
Divide Ridge (Whitefish Lake E.)	190
Castle Creek (Whitefish Lake W.)	1,150
TERRACE BAY	
Craig's Pit	480
Gravel River	790
Prairie River Mouth	290
Red Sucker Point	380
Slate Islands	3,960
Steel River	9,570
GERALDTON	
Little Current River	9,830
Total, 34 Parks	74,352

Region, District Recommended Provincial Parks	Area in Hectares
NORTHERN REGION	
KIRKLAND LAKE	
Pushkin Hills (Ben Nevis Twp.)	1
Larder River	3,630
Thackery	90
COCHRANE	
North Driftwood River (Beniah Twp.)	1
Williams Island/Long Rapids (Hobson Twp.)	6
Little Abitibi River (including Pierre Montreuil)	20,290
De Troyes (Long Point)	2,550
Sextant Rapids (Pitt Twp.)	2
Coral Rapids/Long Rapids (Valentine Twp.)	6
Shallow River (Wilkie Twp.)	1
CHAPLEAU	
Biscotasing	1,150
Missinaibi (inc. Missinaibi Lake/River)	86,450
Nemegosenda Lake (Pattinson Twp.)	4
Shoals Alteration	10,150
TIMMINS	
Dana - Jowsey	2,550
Fredrick House Lake	4
GOGOMA	
La Motte Lake	510
HEARST	
Nagagami Lake	1,480
KAPUSKASING	
Adam Creek (Sanborn Twp.)	50
Total, 19 Parks	128,935

Region, District Recommended Provincial Parks	Area in Hectares
NORTHEASTERN REGION	
BLIND RIVER	
Aubrey Falls	4,710
Mississagi Delta	2,180
Mississagi Extension	1,840
SUDBURY	
French River	43,800
Sturgeon River	2,240
Wanapitei	2,790
NORTH BAY	
Great Manitou Island	80
Restoule Extension	470
Samuel de Champlain Extension	200
South Bay	1,610
ESPANOLA	
La Cloche	6,400
Misery Bay	697
TEMAGAMI	
Makobe - Gray's River	2,990
W. J. B. Greenwood	430
WAWA	
Michipicoten Island	18,360
Potholes	350
Total, 16 Parks	89,147

Region, District Recommended Provincial Parks	Area in Hectares
ALGONQUIN REGION	
PARRY SOUND	
Blackstone Harbour	12,250
O'Donnell Point	790
Round Lake	4,620
BRACEBRIDGE	
Bauer Property	170
Bigwind	1,880
Chetwynd	520
Dividing Lake	310
Hardy Lake	1,590
Oxtongue River - Ragged Falls	650
BANCROFT	
Egan Chutes	320
Kawartha Highlands	1,880
Lowrie Lakes	230
Opeongo River	520
Upper Madawaska River	750
PEMBROKE	
Bell Bay	1,630
Bonnechere River	570
Centennial Lake	3,830
Foy Property	120
Lower Madawaska River	1,770
MacKenzie Lake Addition	1,530
Ottawa River	450
Westmeath	3,530
MINDEN	
MacRae Addition	6,150
Total, 23 Parks	46,060

District, Region Recommended Provincial Parks	Area in Hectares
EASTERN REGION	
BROCKVILLE	
Otter Lake to Charleston Lake (J. Auld)	3,810
TWEED	
Stoco Fen	40
NAPANEE	
Timber Island	40
Total, 3 Parks	3,890
CENTRAL REGION	
LINDSAY	
Harris Island	190
Indian Point	860
Quackenbush	40
Wolf Island	330
HURONIA	
Boyne Valley	930
Giant's Tomb	520
Lavender Falls	390
Mono Cliffs	770
Scott's Falls	410
MAPLE	
Credit Forks	310
Duclos Point	100
NIAGARA	
James N. Allen	280
Short Hills	710
Total, 13 Parks	5,840

Region, District Recommended Provincial Parks	Area in Hectares
SOUTHWESTERN REGION	
AYLMER	
Komoka	500
CHATHAM	
Fish Point	110
Lighthouse Point	100
OWEN SOUND	
Bayview Escarpment	750
Black Creek	770
Cabot Head	8,220
Duncan Crevice Caves	8
Hope Bay Forest	1,420
Ira Lake	460
Johnston Harbour/Pine Tree Point	4,300
Lion's Head	1,830
Little Cove	1,030
Pretty River Valley	930
Smokey Head/White Bluff	1,700
Total, 14 Parks	22,128
TOTAL, 145 Recommended Provincial Parks	790,572

* Recommended parks will be phased into the Provincial Parks system in the near future.

Outdoor Recreation Group

FISHERIES BRANCH
Room W-2354, Main Office Telephone (416) 965-7883

Branch Director.....	A. S. Holder.....	W-2347.....5947
Client Services Section.....	C. A. Haxell, Mgr.....	W-2349.....7885
Extension Specialist.....	A. A. Wainio.....	W-2353.....7885
Data Systems Biologist.....	W. G. Simpson.....	W-2446.....7885
Economist.....	N. Bedi.....	W-2344.....7885
Commercial Development Co-ord..	J. C. Tilt.....	W-2455.....7885
Fish Culture Section.....	J. M. Byrne, Spvr.....	W-2448.....7886
Production Biologist.....	J. H. Hynes.....	W-2449.....7886
Fish Health Biologist.....	A. Sippel.....	W-2453.....7886
Fish Nutrition Specialist.....	C. Y. Cho.....	(519) 824-4120 2212
Fish Requirements Biologist....	B. Potter.....	W-2450.....7886
Fish Culture Operation Co-ord..	C. C. Mack.....	W-2447.....7886
Fish Culture Systems Specialist.....	D. Farquhar.....	W-2454.....7886
Engineer.....	H. Yoshida.....	W-2452.....7886
Environmental Dynamics Section...	D. P. Dodge, Spvr.....	W-2312.....7887
Habitat Enhancement Biologist..	R. M. Biette.....	W-2312.....7887
Habitat Protection Biologist...	J. T. Allin.....	W-2312.....7887
Aquatic Habitat Inventory Biologist.....	G. A. Goodchild.....	W-2312.....7887
Inventory Data Systems & Lab Specialist.....	G. E. Gale.....	W-2312.....7887
Aquatic Habitat Acidification Spec.....	G. L. Beggs.....	W-2312.....7887

Box 50, Maple, Ontario L0J 1E0 Telephone (416) 832-2761

Fisheries Research Section.....	.....	Ext. 251
Age/Growth Studies & Environmental Stress.....	J. Casselman.....	251
Brook Trout Studies.....	J. H. Fraser.....	251
Community Dynamics.....	D. O. Evans.....	251
Limnology.....	A. M. McCombie.....	251
Stocks Assessment & Genetics.....	P. Ihssen.....	251
Harkness Memorial Lab (winter).	J. A. MacLean.....	251
Harkness Memorial Lab (summer).	J. A. MacLean.....	(705) 637-2103
Systems Ecology.....	B. Shuter.....	251

RESEARCH STATIONS

Fisheries Research Section.....	R. A. Ryder.....	(807) 683-6232
Box 5000, Thunder Bay, Ont	P. J. Colby.....	475-1635
P7C 5G6		
Sault Ste. Marie Research Stn....	W. H. Kwain.....	(705) 942-1411
875 Queen St. E.,		
Sault Ste. Marie, Ont. P6A 2B3		
South Baymouth Fisheries Lab.....	B. Henderson.....	(705) 859-3137
R.R. 1, Tehkummah, Ont. POP 2C0	J. A. Reckahn.....	3137
Wheatley Fisheries Research Stn..	S. J. Nepszy.....	(519) 825-4171
R.R. 2, Wheatley, Ont. NOP 2P0	J. H. Leach.....	4171
Glenora Fisheries Research Stn...	W. J. Christie.....	(613) 476-2400
R.R. 4, Picton, Ont. K0K 2T0	D. A. Hurley.....	2400
Harkness Lab (Algonquin Park)....	Dr. J. A. MacLean.....	(705) 637-2103
Box 110, Whitney, Ont. K0J 2M0		

FISH PLANTINGS

Numbers in 000s of Fish (F) and Eggs (E)
Stocked from Ontario Fish Culture Stations

Species	E/F	1979	1980	1981	1982	1983
Coho Salmon	F	286	418	224	144	181
Chinook Salmon	F	147	18	12	270	222
Rainbow Trout	F	1,099	1,347	395	369	318
Brown Trout	F	-	-	-	71	134
Brook Trout	E	18	-	860	-	302
	F	682	1,260	1,459	824	1,757
Lake Trout	E	6	5	-	-	25
	F	1,478	1,928	2,636	2,517	1,874
Lake Trout Backcross	F	-	-	-	-	856
Splake	E	-	76	-	-	180
	F	800	798	684	927	104
Aurora Trout	F	21	17	30	-	21
Whitefish	F	-	-	-	13	15
Muskellunge	F	1,490	1,120	791	1,146	902
Smallmouth Bass	F	78	65	160	-	-
Largemouth Bass	F	-	-	-	-	-
Walleye	E	13,450	-	-	-	-
	F	10	472	29	31	156
Total		19,567	7,523	7,250	6,312	7,047

COMMERCIAL FISHING LICENCES

Year	Food-Fish Harvesting	Bait-Fish Harvesting	Bait-Fish Dealers	Bait-Fish Preservers	Total
1979	1,093	1,549	1,791	114	4,547
1980	1,029	1,728	1,858	124	4,739
1981	1,047	1,712	1,861	142	4,762
1982	1,068	1,694	1,847	134	4,743
1983	961	1,782	1,961	148	4,852

ANGLING LICENCES

Year	Number Sold to Non-Residents
1979	673,925
1980	628,988
1981	673,334
1982	661,934
1983	627,508

FISH STOCKING from Ontario Provincial Fish Culture Stations

For the fiscal year ending March 31, 1984 (E-Eggs)

Station	Species	Quantity	Weight (kg)
Codrington	Brown Trout	134,271	3,966
Chatsworth	Lake Trout	122,238	2,873
	Lake Trout Backcross	725,940	36,468
	Splake	1,568	845
	Whitefish	14,661	558
Deer lake	Rainbow Trout	83,655	3,359
	Brook Trout	38,843	373
	Lake Trout	148,557	1,776
	Muskellunge	902,393	141
Dorion	Brook Trout	344,756	4,506
		302,460 E	-
	Lake Trout	688,186	15,845
Hill's Lake	Brook Trout	497,694	5,221
	Lake Trout	10,000	13
Normandale	Rainbow Trout	112,305	6,977
North Bay	Brook Trout	180,047	2,055
	Lake Trout	80,492	2,206
	Splake	99,649	2,231
	Aurora Trout	21,100	7
	Coho Salmon	6,666	258
Pembroke	Brook Trout	222,740	2,228
	Lake Trout	162,350	2,158
Ringwood	Coho Salmon	174,779	5,329
	Chinook Salmon	221,699	287
Sandfield	Brook Trout	32,340	206
	Lake Trout	53,300	930
		25,000 E	-
	Lake Trout Backcross	130,008	3,607
	Splake	300	216
		180,000 E	-
Skeleton Lake	Rainbow Trout	53,661	289
	Brook Trout	193,450	1,384
	Lake Trout	95,880	637
Tarentorus	Rainbow Trout	56,523	4,011
	Brook Trout	204,000	1,794
	Lake Trout	269,557	2,791
White Lake	Rainbow Trout	225	23
	Brook Trout	13,525	199
	Lake Trout	192,910	2,468
	Splake	2,000	29
	Walleye	155,835	107
Westport	Rainbow Trout	11,429	906
	Brook Trout	29,180	437
	Lake Trout	50,917	1,136

EMPLOYMENT AND INVESTMENT IN COMMERCIAL FISHERY - 1983

Classification		Lake Ontario	Lake Erie	Lake St. Clair	Lake Huron
Men employed	No.	236	915	23	136
FISHING BOATS					
12.2 m and over	No.	6	162	-	28
	kg	87,996	4,731,851	-	490,784
	Value $	327,000	22,831,595	-	2,557,358
6.1 m to 11.9 m	No.	57	32	10	14
	Value $	748,650	491,150	96,700	313,500
Under 6.1 m	No.	187	54	7	9
	Value $	383,495	70,145	14,900	6,150
FISHING GEAR					
Gill Nets	Metres	1,035,096	7,884,964	-	1,168,512
	Value $	770,297	6,091,705	-	1,113,700
Pound Nets	No.	-	27	142	2
	Value $	-	50,000	102,000	3,000
Trap Nets	No.	94	247	163	118
	Value $	101,000	581,500	113,500	230,941
Hoop Nets	No.	955	155	40	-
	Value $	386,050	70,200	30,000	-
Seine Nets	Metres	3,388	3,731	778	-
	Value $	36,400	43,300	6,400	-
Night Lines	No.	48,866	5,600	6,009	1,000
	Value $	24,386	6,100	5,000	300
Dip Nets	No.	21	7	-	3
	Value $	341	716	-	32
Trawl Nets	No.	-	331	-	7
	Value $	-	797,335	-	22,000
Trammel Nets	Metres	-	-	-	-
	Value $	-	-	-	-
SHORE INSTALLATIONS					
Freezers & Icehouses	No.	32	33	6	29
	Value $	247,600	1,406,734	87,000	493,600
Piers & Wharves	No.	35	38	8	9
	Value $	160,380	259,700	33,200	83,800
Net Sheds	No.	91	127	12	26
	Value $	330,159	2,359,722	158,000	506,800
Miscellaneous	Value $	6,200	5,710	-	-
NEW CAPITAL INVESTMENT					
Engines	Value $	86,676	137,651	1,400	5,085
Hulls	Value $	119,539	121,320	2,300	6,400
Fishing Gear	Value $	178,326	1,353,741	1,260	203,974
Wheelhouse Equip.	Value $	14,677	238,129	-	48,645
Other Equipment	Value $	-	24,800	-	-
TOTAL NEW CAPITAL INVESTMENT		399,218	1,875,641	4,960	264,104
TOTAL INVESTMENT		3,921,176	36,941,253	651,660	5,595,285

EMPLOYMENT AND INVESTMENT IN COMMERCIAL FISHERY - 1983

Classification		Georgian Bay	North Channel	Lake Superior	Northern Inland Waters	Southern Inland Waters	Total
Men Employed		82	73	145	312	59	1,981
FISHING BOATS							
12.2 m & over	No.	14	15	21	5	-	251
	kg	192,322	248,567	464,476	68,039	-	6,284,035
	Value $	713,500	643,358	1,877,000	188,000	-	29,137,811
6.1m to 11.9m	No.	19	7	25	60	6	230
	Value $	278,600	21,300	267,100	287,316	22,900	2,527,216
Under 6.1m	No.	20	18	52	156	37	540
	Value $	53,300	25,275	97,380	331,705	49,900	1,032,250
FISHING GEAR							
Gill Nets	Meters	601,218	322,052	1,093,782	454,397	19,065	12,579,086
	Value $	492,950	233,920	875,675	364,640	14,080	9,956,967
Pound Nets	No.	9	1	8	18	-	207
	Value $	6,900	2,000	20,000	16,500	-	200,400
Trap Nets	No.	6	15	9	110	14	776
	Value $	21,000	53,500	14,600	124,810	13,800	1,254,651
Hoop Nets	No.	-	7	2	79	410	1,648
	Value $	-	1,000	3,000	16,120	106,970	613,340
Seine Nets	Metres	-	-	-	-	1,081	8,978
	Value $	-	-	-	-	5,800	91,900
Night Lines	No.	-	-	-	750	3,300	65,525
	Value $	-	-	-	500	1,635	37,921
Dip Nets	No.	5	1	10	23	3	73
	Value $	101	70	205	370	115	1,950
Trawl Nets	No.	-	-	14	-	-	352
	Value $	-	-	30,500	-	-	849,835
Trammel Nets	Metres	-	-	-	-	1,861	1,861
	Value $	-	-	-	-	4,650	4,650
SHORE INSTALLATIONS							
Freezers & Icehouses	No.	23	20	40	84	10	277
	Value $	167,100	215,550	1,541,600	411,926	9,513	4,580,623
Piers & Wharves	No.	15	9	43	76	10	243
	Value $	62,650	31,383	122,150	124,528	18,725	896,516
Net Sheds	No.	19	19	60	74	16	444
	Value $	151,500	119,076	317,300	168,860	21,760	4,133,177
Misc.	Value $	-	-	15,000	102,000	75	128,985
NEW CAPITAL INVESTMENT							
Engines	Value $	14,400	26,488	83,600	77,487	10,450	443,237
Hulls	Value $	53,000	22,000	72,700	25,040	3,000	425,299
Fishing Gear	Value $	46,615	71,444	126,512	55,978	10,966	2,048,816
Wheelhouse Equip.	Value $	27,395	7,644	23,400	2,300	-	362,190
Other Equipment	Value $	-	-	-	22,669	-	47,469
TOTAL NEW CAPITAL INVESTMENTS		141,410	127,576	306,212	183,474	24,416	3,327,011
TOTAL INVESTMENT		2,089,011	1,474,008	5,487,722	2,320,749	294,339	58,775,203

COMMERCIAL FISH INDUSTRY

Commercial Fish Harvest - January to December 1983

shown in kilograms and dollar value

Species	Lake Ontario	Lake Erie	Lake St. Clair	Lake Huron	Georgian Bay
Bowfin	5	37,123	7,382	-	-
Bullhead	132,797	33,964	768	-	739
Burbot (ling)	-	2,766	-	7,538	1,861
Carp	43,335	88,569	19,080	12,177	931
Catfish	7,643	36,139	35,511	27,152	61
Chub (Deepwater Cisco)	-	-	-	251,940	124,298
Crappie	14,114	9,249	30	-	-
Eel	66,779	139	-	3	-
Lake Herring	2,598	-	-	10,842	10,353
Lake Trout	-	-	-	56,369	198
Lake Whitefish	6,189	11,179	-	1,299,830	36,648
Freshwater Drum	1,917	144,618	15,797	25,228	-
Northern Pike	7,024	7,117	2,396	100	3,319
Pacific Salmon	63	22,205	-	8,650	296
Rock Bass	7,864	20,191	2,993	177	124
Round Whitefish	35	-	-	4,438	6,497
Sauger	3	-	-	-	-
Shad	123	11,351	-	2,960	-
Smelt	44,025	13,269,551	-	131	11
Splake	-	2,314	-	585	23,323
Sturgeon	198	1,034	-	1,395	-
Sucker	12,026	12,875	25,721	29,658	21,625
Sunfish	58,406	26,975	-	-	-
White Bass	3,625	2,059,539	5,851	6,696	99
White Perch	28,864	38,693	1,125	242	-
Yellow Perch	579,769	2,538,719	4,727	227,455	29,354
Yellow Pickerel	1,978	1,400,067	-	129,105	7,016
Animal Food	6,351	588,485	529	23,686	3,095
Total Landings (kg)	1,025,731	20,362,862	121,910	2,126,357	269,848
Total Value ($)	1,880,261	17,748,419	76,328	4,230,966	478,115

COMMERCIAL FISH INDUSTRY

Commercial Fish Harvest - January to December 1983

shown in kilograms and dollar value

Species	North Channel	Lake Superior	Northern Inland Waters	Southern Inland Waters	Total Landings (kg)	Total Value ($)
Bowfin	-	-	-	-	44,510	6,717
Bullhead	428	-	3,012	49,485	221,193	212,545
Burbot (ling)	1,411	-	57,612	875	72,063	3,766
Carp	502	-	-	16,178	180,772	68,525
Catfish	4	-	-	4,410	110,920	110,171
Chub (Deepwater Cisco)	122	31,106	112,412	-	519,878	692,496
Crappie	-	-	-	4,872	28,265	59,500
Eel	-	-	-	2,348	69,269	111,303
Lake Herring	2,118	563,428	18	-	589,357	417,359
Lake Trout	1,805	185,320	17,992	-	261,684	800,935
Lake Whitefish	199,866	133,512	538,929	-	2,226,153	3,081,312
Freshwater Drum	5	-	261	238	188,064	32,964
Northern Pike	7,264	2,706	248,311	7	278,244	225,427
Pacific Salmon	33,293	4,279	-	98	68,884	105,070
Rock Bass	508	-	14,422	3,251	49,530	80,318
Round Whitefish	2,520	13,068	-	-	26,558	16,112
Sauger	-	-	20,120	27	20,150	24,972
Shad	-	-	-	-	14,434	708
Smelt	17	377	-	1,937	13,316,049	3,679,257
Splake	3,064	-	-	-	29,286	83,609
Sturgeon	2,219	160	14,765	2,045	21,816	126,277
Sucker	17,221	104,677	258,818	1,497	484,118	77,289
Sunfish	-	-	-	25,986	111,367	111,719
White Bass	17	-	306	293	2,076,426	1,793,082
White Perch	-	-	-	5,397	74,321	91,219
Yellow Perch	37,623	40,407	2,791	11,626	3,472,471	11,355,933
Yellow Pickerel	9,676	167	292,402	-	1,840,411	4,447,517
Animal Food	61,160	-	108,649	22,079	814,034	21,540
Total Landings (kg)	380,843	1,079,207	1,690,820	152,649	27,210,227	
Total Value ($)	554,125	1,297,169	1,420,446	151,813		27,837,642

ONTARIO COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Species	1979	1980	1981	1982	1983	1983 Value
Bowfin	14	9	20	13	45	7
Bullhead	236	241	234	204	221	213
Burbot (ling)	129	108	182	81	72	4
Carp	180	121	208	158	181	68
Catfish	96	85	117	96	111	110
Chub (Deepwater Cisco)	498	446	394	308	520	693
Pacific Salmon	21	17	38	27	69	105
Eel	226	168	112	32	69	111
Freshwater Drum	164	179	257	230	188	33
Goldeye	-	-	-	-		
Lake Herring (Cisco)	990	1,464	1,456	1,122	589	417
Lake Trout	165	278	227	258	262	801
Lake Whitefish	1,289	1,681	1,748	1,765	2,226	3,081
Northern Pike	312	267	296	321	278	225
Rock Bass & Crappie	99	75	64	58	78	140
Round Whitefish	46	75	57	35	27	16
Sauger	16	17	20	28	20	25
Smelt	10,892	11,336	13,944	19,611	13,316	3,679
Splake	9	39	57	40	29	84
Sturgeon	15	21	20	20	22	126
Sucker (Mullet)	630	563	606	626	484	77
Sunfish	127	118	126	130	111	112
White Bass	763	904	896	1,579	2,076	1,793
White Perch	49	57	47	39	74	91
Yellow Perch	5,873	6,236	4,784	4,962	3,473	11,356
Yellow Pickerel	1,046	1,343	1,476	1,368	1,841	4,447
Animal Food	1,010	637	772	688	828	23
Total Landings	24,895	26,485	28,158	33,799	27,210	
Total Landed Value	$25,874	$23,644	$31,767	$36,788		$27,837

ONTARIO COMMERCIAL FISH HARVEST

by waters in 000s kg and $000s

Year	Lake Ontario	Lake Erie	Lake St. Clair	Lake Huron	Georgian Bay
1979	878	18,473	-	858	331
1980	891	19,490	37	1,083	361
1981	1,163	20,334	93	1,461	346
1982	939	26,989	153	1,324	269
1983	1,025	20,363	122	2,126	270

Year	North Channel	Lake Superior	Northern Inland Waters	Southern Inland Waters	Total	Total $
1979	210	1,621	2,217	307	24,895	25,874
1980	158	2,151	2,080	234	26,485	23,644
1981	314	2,060	2,154	233	28,158	31,767
1982	322	1,515	2,091	197	33,799	36,788
1983	381	1,079	1,691	153	27,210	27,837

LAKE ONTARIO COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Year	Bullhead and Catfish	Carp	Eel	Lake Herring	Smelt	Sunfish
1979	163	4	222	13	26	70
1980	176	-	164	5	22	72
1981	154	73	109	2	34	60
1982	120	13	29	2	37	69
1983	141	43	67	3	44	58

Year	White Perch	Yellow Perch	Other Species	Total	Total $
1979	46	253	81	878	1,478
1980	55	265	132	891	1,147
1981	48	563	120	1,163	1,930
1982	34	539	96	939	1,905
1983	29	580	60	1,025	1,880

LAKE ERIE COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Year	Bullhead and Catfish	Carp	Freshwater Drum	Smelt	White Bass
1979	54	15	122	10,831	756
1980	56	10	151	11,296	888
1981	76	15	212	13,790	881
1982	54	19	190	19,556	1,556
1983	70	89	145	13,270	2,060

Year	Yellow Perch	Yellow Pickerel	Other Species	Total	Total $
1979	5,423	538	734	18,473	17,592
1980	5,674	800	615	19,490	14,024
1981	3,795	956	609	20,334	20,261
1982	4,134	909	571	26,989	26,183
1983	2,539	1,400	790	20,363	17,748

LAKE ST. CLAIR COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Year	Bullhead and Catfish	Carp	Freshwater Drum	Northern Pike	Rock Bass & Crappie
1979	-	-	-	-	-
1980	7	14	5	1	1
1981	22	34	11	1	1
1982	30	74	17	1	2
1983	26	19	16	2	3

Year	Sucker	White Bass	Yellow Perch	Other Species	Total	Total $
1979	-	-	-	-	-	-
1980	5	2	-	2	37	23
1981	11	5	1	7	93	53
1982	15	8	1	5	153	77
1983	26	6	5	9	122	76

LAKE HURON COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Year	Carp	Chub	Lake Herring	Lake Whitefish	Round Whitefish
1979	17	67	3	375	5
1980	15	101	3	524	6
1981	14	219	3	594	4
1982	13	194	4	702	4
1983	12	252	11	1,300	4

Year	Sucker (Mullet)	Yellow Perch	Yellow Pickerel	Other Species	Total	Total $
1979	30	49	95	217	858	1,730
1980	18	201	124	91	1,083	2,369
1981	49	246	124	208	1,461	3,255
1982	63	135	117	92	1,324	2,833
1983	30	227	129	161	2,126	4,231

GEORGIAN BAY COMMERCIAL FISH HARVEST

by species 000s kg and $000s

Year	Carp	Chub	Lake Herring	Lake Whitefish	Round Whitefish
1979	4	122	21	74	19
1980	7	77	20	88	15
1981	2	57	12	105	8
1982	2	57	12	77	9
1983	1	124	10	37	6

Year	Sucker (Mullet)	Yellow Perch	Yellow Pickerel	Other Species	Total	Total $
1979	13	45	17	16	331	641
1980	41	36	11	66	361	505
1981	28	49	11	74	346	669
1982	20	39	9	44	269	504
1983	22	29	7	34	270	478

NORTH CHANNEL COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Year	Smelt	Lake Whitefish	Northern Pike	Round Whitefish	Sturgeon
1979	-	63	9	3	2
1980	-	73	6	1	4
1981	-	120	13	2	3
1982	-	171	9	1	2
1983	-	200	7	3	2

Year	Sucker (Mullet)	Yellow Perch	Yellow Pickerel	Other Species	Total	Total $
1979	36	29	20	48	210	280
1980	34	7	13	20	158	279
1981	26	52	20	78	314	526
1982	27	39	20	53	322	618
1983	17	38	10	104	381	554

LAKE SUPERIOR COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Year	Chub	Lake Herring	Lake Trout	Lake Whitefish	Smelt
1979	271	887	111	159	34
1980	240	1,282	212	225	17
1981	91	1,327	176	173	42
1982	18	901	189	164	17
1983	31	563	185	133	-

Year	Sucker (Mullet)	Yellow Perch	Yellow Pickerel	Other Species	Total	Total $
1979	75	47	-	37	1,621	1,723
1980	77	38	-	60	2,151	2,606
1981	110	61	-	80	2,060	2,246
1982	124	61	1	40	1,515	2,063
1983	105	40	-	22	1,079	1,297

NORTHERN INLAND WATERS COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Year	Burbot	Chub	Lake Herring	Lake Trout	Lake Whitefish
1979	122	38	63	34	616
1980	91	27	154	32	765
1981	169	26	106	18	745
1982	70	40	200	48	629
1983	58	112	-	18	539

Year	Northern Pike	Sucker (Mullet)	Yellow Pickerel	Other Species	Total	Total $
1979	266	446	353	279	2,217	2,228
1980	226	337	337	111	2,080	2,533
1981	246	358	363	123	2,154	2,641
1982	275	341	311	177	2,091	2,426
1983	248	259	292	165	1,691	1,421

SOUTHERN INLAND WATERS COMMERCIAL FISH HARVEST

by species in 000s kg and $000s

Year	Bullhead & Catfish	Carp	Lake Whitefish	Rock Bass & Crappie	Sucker (Mullet)
1979	58	138	-	11	9
1980	57	71	-	4	15
1981	63	69	-	8	4
1982	63	34	-	11	19
1983	54	16	-	8	1

Year	Sunfish	White Perch	Yellow Perch	Other Species	Total	Total $
1979	31	3	18	39	307	203
1980	29	2	11	45	234	157
1981	34	3	15	37	233	186
1982	34	1	10	25	197	181
1983	26	5	12	31	153	152

EMPLOYMENT AND INVESTMENT IN ONTARIO COMMERCIAL FISHERY

Year	Employees	40' & Over	Under 40'	Gill M 000s	Pound Nets	Trap Nets	Hoop Nets
1979	1997	212	913	10,689	80	476	1497
1980	1964	213	837	12,068	172	556	1630
1981	2043	237	885	12,616	160	689	1430
1982	2106	238	980	12,735	269	732	1504
1983	1981	251	770	12,579	207	776	1648

Year	Seine M 00s	Freezers & Ice Houses	Wharves and Piers	Net Sheds	New Invest. $000s	Total Value $000s
1979	62	309	263	451	2,834	33,950
1980	75	317	250	457	3,714	41,481
1981	77	291	275	476	5,447	54,676
1982	78	322	277	482	3,655	57,345
1983	89	277	243	444	3,327	58,775

LANDS AND WATERS GROUP

Room W-6626, Main Office Telephone (416) 965-6045

Executive Co-ordinator.....	H. A. Clarke.....	W-6626.....6046
Administrative Assistant.....	Ms. H. Cobden.....	W-6623.....1075
Res. Economist.....	Dr. P. L. M. Warwick....	W-6625.....5067

LAND MANAGEMENT BRANCH

Room W-6643, Main Office Telephone (416) 965-1316

Branch Director.....	S. E. Yundt.....	W-6643.....1498
Secretary.....	Mrs. B. Bourne.....	W-6643.....1316
Admin. Asst.....	Mrs. B. Luksis.....	W-6643.....1316
Chief Mining Recorder.....	W. L. Good.....	W-6521...3-3093
Training Co-ordinator.....	C. Turpenney.....	W-6644.....1607
Public Lands Section.....	J. Morton, Spvr.....	W-6603.....2741
Public Lands Management.....	L. Fleguel.....	W-6621.....4507
Disposition.....	W. P. Small.....	W-6621.....2743
Land Appraisals and Property Management Officer.....	J. Cameron.....	W-6629.....2742
Land Management Planning.....	N. C. Gordon.....	W-6604.....2742
Land Acquisition Officer.....	J. Paige.....	W-6629.....2743
Mining Lands Section.....	J. C. Smith, Spvr.....	W-6602.....1380
Mining Lands Administrator.....	F. W. Matthews.....	W-6610.....6918
Mining Lands Administrator.....	R. Pichette.....	W-6610.....4888
Titles Section.....	J. Hogan, Spvr.(acting).	W-6645.....1319
Document Officer.....	C. D. Egerton.....	W-6645.....1319
Acreage Tax Administrator.....	Mrs. D. Holland.....	W-6645.....1319
Records Officer.....	R. E. Dixon.....	W-6645.....1319
Land Records Manager.....		W-6645.....1319
Resource Access Section.....	P. Brook, Spvr.(acting).	W-6642.....5735

PUBLIC LAND in years ending March 31

Year	Patents		Leases		Licences of Occupation	
	No.	ha	No.	ha	No.	ha
1979	126	523	63	99	79	3,580
1980	578	1,216	201	198	135	3,407
1981	890	1,093	162	276	100	3,066
1982	690	2,385	211	448	113	845
1983	1,093	1,517	114	208	96	472
1984	1,324	8,674	110	365	90	106

LANDS ACQUIRED BY CROWN in years ending March 31

Year	Provincial Tax Forfeitures	Cancellation of Sales	Purchased or Otherwise Acquired	Forfeitures
	ha	ha	ha	ha
1979	-	0.4	2,075	22,663
1980	0.4	-	2,480	15,783
1981	1.20	0.16	703	3,600
1982	492	-	722	6,275
1983	661	-	1,402	4,047
1984	482	1	520	2,832

USE OF ACQUIRED LANDS areas in hectares, years ending March 31

Year	Provincial Parks ha	Lands General ha	Sport Fisheries ha	Wildlife Mgmt. ha	Timber Mgmt. ha	Total ha	Interim Property Mgmt.
1975	4,815	87	0.80	384	-	5,286	-
1976	2,143	12	6	163	-	2,325	-
1977	630	140	81	248	2	1,101	35,424
1978	548	4.04	-	111	4,332	4,995	36,095
1979	2,028	79	-	-	3	2,110	34,715
1980	2,350	109	16	-	5	2,480	35,008
1981	549	-	51	3	100	703	34,692
1982	588	32	47	24	31	722	26,633
1983	261	56	146	213	726	1,402	25,113
1984	420	2	-	-	98	520	20,280

MINING LANDS in years ending March 31

Year	Patents		Renewals		Leases New	
	No.	ha	No.	ha	No.	ha
1979	-	-	137	2,049	53	3,923
1980	-	-	185	5,327	94	11,185
1981	-	-	141	2,302	60	7,704
1982	-	-	77	1,226	68	6,446
1983	-	-	85	1,937	80	9,230
1984	-	-	71	779	287	10,999

Year	Surface Rights		Licences of Occupation		Quit Claim Deeds and Regrants	
	No.	ha	No.	ha	No.	ha
1979	1	37	2	27,694	142	3,764
1980	2	90	1	16	297	7,538
1981	-	-	5	147,191	38	624
1982	-	-	3	366,705	49	1,157
1983	-	-	1	864	45	1,196
1984	1	372	3	3,012	77	952

PROSPECTING ACTIVITIES

in years ending March 31

Year	Mining Claims		In Good Standing	Assessment Work (Days)	Quarry Permits Issued	Miners' Licences	
	Recorded	Cancelled				Issued	Renewed
1979	13,041	16,444	37,669	752,155	1,178	991	1,723
1980	16,875	10,952	36,092	437,619	1,301	1,347	1,854
1981	36,535	11,279	72,809	972,469	1,188	2,130	2,660
1982	26,075	17,709	76,125	1,565,197	1,520	1,871	2,796
1983	55,942	24,395	113,167	1,516,226	1,449	2,040	3,190
1984	57,774	20,958	144,812	3,461,208	1,567	2,400	3,343

1983/84 MNR ROADS PROGRAM

REGION	kms Con./Recon.	Bridges Con./Recon	Expenditures ($000s)	kms Maintained	Expenditure ($000s)
NORTHERN ONTARIO					
Northwestern	6.0	-	$318.1	827.0	$453.0
North Central	52.4	4	871.0	1,528.5	759.3
Northern	58.5	2	796.9	1,202.0	913.5
Northeastern	61.4	-	989.6	1,726.0	442.5
Subtotals	178.3	6	$2,975.6	5,283.5	$2,568.3
SOUTHERN ONTARIO					
Algonquin	0.7	-	$42.5	974.0	$321.9
Eastern	4.8	-	107.9	625.0	155.9
Central	-	-	-	178.7	67.0
Southwestern	-	-	-	144.3	36.3
Subtotals	5.5	-	$150.4	1,922.0	$581.1
PROVINCIAL TOTALS	183.8	6	$3,126.0	7,205.5	$3,149.4

Program includes: Forest Access, Agreement Forest, Ministry Service, Fuelwood Access, Public Transport, Private Forest Road Maintenance Agreements and Recreational Access Roads.

1983/84 NORTHERN ONTARIO RESOURCES
TRANSPORTATION COMMITTEE - DIRECT PROGRAM (MNR portion only)

REGION	kms Con./Recon.	Bridges Con-structed	Expendi-tures ($000s)	kms Main-tained	Expendi-tures (000s)	kms Winter Road	Expendi-tures ($000s)
Northwestern	11.7	-	$1,655.3	78.0	$34.1	226.0	$245.3
North Central	1.2	-	83.7	32.0	13.2	-	-
Northern	54.4	1	968.8	-	-	288.0	-
Northeastern	17.0	-	273.4	22.5	5.5	-	106.9
TOTAL	84.3	1	$2,981.2	132.5	$52.8	514.0	$352.2

1983/84 NORTHERN ONTARIO RESOURCES TRANSPORTATION
COMMITTEE - INDIRECT PROGRAM (COMPANY) - (MNR Portion Only)

	kms Con./Recon	Bridges Cons./Recon.	Expenditures ($000s)
Northwestern	9.6	-	$175.7
North Central	21.9	-	180.8
Northern	-	-	-
Northeastern	-	-	-
TOTAL	31.5	-	$356.5

1983/84 FOREST MANAGEMENT
SUBSIDIARY AGREEMENT PROGRAM*

CROWN PROJECTS

REGION	kms Con./Recon.	Bridges Con./Recon.	Expenditures ($000s)
Northwestern	-	-	$79.4**
North Central	67.1	1.5	8,117.9
Northern	9.0	1.0	1,304.6
Northeastern	21.0	2.0	2,087.9
Contract Staff	-	-	62.5
TOTAL	97.1	4.5	$11,652.3

** clearing and sand fill

COMPANY PROJECTS

REGION	kms Con./Recon.	Bridges Con./Recon.	Expenditures ($000s)
Northwestern	-	-	-
North Central	15.7	1	$699.9
Northern	14.5	-	307.5
Northeastern	-	-	-
TOTAL	30.2	1	$1,007.4
TOTAL PROGRAM	127.3	5.5	$12,659.7

* FMSA Program is co-funded by the federal and provincial governments.

1983/84 FOREST MANAGEMENT AGREEMENT PROGRAM*
(Partially Funded by BILD)

REGION	kms Con./Recon.	Expenditures ($000s)	km Maintained	Expenditures ($000s)
Northwestern	87.2	$2,020.2	120.3	$49.5
North Central	255.6	5,622.5	493.7	157.5
Northern	531.6	11,815.0	618.0	240.5
Northeastern	179.6	3,727.6	55.3	55.3
TOTAL	1,054.0	$23,185.3	1,366.0	$502.8

The FMA Program is funded in accordance with agreements between MNR and forest companies.

1983/84 BILD - CAPITAL ACCELERATION PROGRAM

REGION	kms Con./Recon.	Bridges Con./recon.	Expenditures ($000s)
Northwestern	24.8	-	$1,076.2
North Central	16.4	2	277.5
Northern	130.4	1	3,232.0
Northeastern	17.0	-	418.0
TOTAL	188.6	3	$5,003.7

1983/84 RESOURCE ACCESS PROGRAM SUMMARY
MNR ROAD & BRIDGE CONSTRUCTION & MAINTENANCE

Crown	MNR Roads Program	BILD Program	NORTC Program	FMSA Program	FMA Program	Totals
Road Con./ Recon. (kms)	183.8 6 bridges	188.6 3 bridges	84.3 1 bridge	97.1 4.5 bridges	-	553.8 14.5
Expenditures	$3,126.0	$5,003.7	$2,981.2	$11,652.3	-	$22,763.2
Road Maintained (kms)	7,205.5	-	132.5	-	-	7,338.0
Expenditures	$3,149.4	-	$52.8	-	-	$3,202.2
Winter Road Con./Recon. (kms)	-	-	514.0	-	-	514.0
Expenditures	-	-	$352.2	-	-	$352.2

ROADS & BRIDGES CONSTRUCTED & MAINTAINED
BY COMPANIES UNDER AGREEMENT

Company	NORTC Program	FMSA Program	FMA Program	Totals
Road Con./ Recon. (kms)	31.5	30.2 1 bridge	1,054.0	1,115.7 1 bridge
Expenditures	$356.5	$1,007.4	$23,185.3	$24,549.2
Road Maintained (kms)	-	-	1,366.0	1,366.0
Expenditures	-	-	$502.8	$502.8

Lands and Waters Group

SURVEYS AND MAPPING BRANCH

Room W-3440, Main Office Telephone (416) 965-6225

Surveyor General, Branch Director	J. H. O'Donnell.....	W-3448.....6225
Surveying Services, General Mgr..	S. B. Panting.....	W-3446.....4538
Surveys Manager.....	D. E. Norris.....	W-3449.....2714
Asst. Mgr. Examinations.....	J. E. Hietala.....	W-3444.....2714
Asst. Mgr. Technical Services..	J. A. MacIntosh.....	W-3447.....2714
Survey Research and Descriptions.....	R. F. Weatherbe.....	W-3442.....2714
Survey Records Information.....	D. E. Jeanes.....	W-3422.....1416
Geographical Referencing Mgr...	J. H. Kerr.....	W-3425.....4538
Mathematical Adjustments, Head.	Z. Jiwani.....	W-3427.....4538
Control Survey Analyst.....	K. M. Kelly.....	W-3427.....4789
LRIS Analyst and Technologist..	G. R. Zillmer.....	W-3450.....2779
Geodetic Analyst.....	C. Broughton.....	W-3423.....2198
Mapping Services, General Manager	C. T. Osborne.....	W-2540.....4941
Cartographic Services.....	F. W. Dawson.....	W-2540.....4743
Drafting Services Manager.....	D. W. Robeson.....	W-2540.....1823
Nomenclature Services Manager..	M. B. Smart.....	W-2601.....6515
Basic Mapping Manager.....	B. Jackson.....	W-2540.....1208
Chief Contract Monitor.....	R. Audas.....	W-2640.....0293

Ontario Centre for Remote Sensing
880 Bay Street, Toronto, Ont. M5S 1Z8

Associate Director.....	V. Zsilinszky.....	8411
Chief Scientist.....	S. Pala.....	8411
Senior Scientist.....	A. Boissonneau.....	8411
Senior Scientist.....	A. Jano.....	8411
Staff Scientist.....	R. Mussakowski.....	8411
Staff Scientist.....	T. Ellis.....	8411
Staff Scientist.....	Vacant.....	8411
Research Officer, Engineering..	V. Singhroy.....	8411
Airborne Program Co-ordinator..	I. Ross.....	8411
Airborne Program Specialist....	Vacant.....	8411
Photo Research Lab Supervisor..	D. Klimes.....	8411

MAPPING SERVICES

ONTARIO BASIC MAPPING

1:20000 , 1:10000 scales

Completed

In progress

To be mapped

1:2000 scale

198 Communities completed.
79 Communities in progress.

SURVEYING SERVICES

Area of original township surveys.

Township boundaries resurveyed / restored

9495 kms completed

SURVEYING SERVICES

Township Boundary Resurvey Program

Year	Km. Resurveyed
1961-62	334.34
1962-63	277.93
1963-64	276.89
1964-65	604.39
1965-66	601.94
1966-67	466.07
1967-68	419.07
1968-69	442.59
1969-70	424.87
1970-71	494.71
1971-72	529.47
1972-73	388.93
1973-74	306.95
1974-75	395.11
1975-76	277.82
1976-77	324.82
1977-78	328.31
1978-79	494.39
1979-80	525.29
1980-81	461.72
1981-82	407.57
1982-83	405.30
1983-84	307.50
Total	9,495.40

CROWN LAND SURVEY PLAN EXAMINATIONS

Year	No. Plans Examined
1978-79	270
1979-80	317
1980-81	323
1981-82	641
1982-83	791
1983-84	831

DESCRIPTIONS PREPARED

Year	No. Descriptions Prepared
1978-79	897
1979-80	903
1980-81	779
1981-82	1,052
1982-83	1,585
1983-84	2,119

PROVINCIAL HORIZONTAL CONTROL SURVEY

Data Base COSINE

Year	Stations Loaded
1981-82	10,000
1982-83	13,000
1983-84	11,000
Total	34,000

PRECISE CALIBRATION BASELINE INSTALLATION

Year Installed	Baseline Name
1977-78	Mississauga
1979-80	Scarborough
1980-81	Burlington
1981-82	London
1982-83	Belleville
1983-84	Lindsay & Conestoga

Lands and Waters Group

OFFICE OF INDIAN RESOURCE POLICY

Room 6527, Whitney Block Telephone (416) 965-6045

Director	E. G. Wilson	W-6527.....6045
Secretary	C. A. Ritchie	W-6527.....6045
Indian Resource Policy Advisor	S. J. Houston	W-6529.....5201
Clerk Steno	S. W. Ko	W-6528.....5201
Senior Indian Land Claims Researcher	D. T. McNab	W-6526.....5201
Indian Land Claims Researcher	L. C. Hansen	W-6530.....5201
Indian Land Claims Researcher	D. J. Bourgeois	W-6530.....5201
Indian Land Claims Researcher	D. L. Rankin	W-6530.....5201
Clerk Steno	P. Williams	W-6520.....5201

Lands and Waters Group

CONSERVATION AUTHORITIES AND WATER MANAGEMENT BRANCH

Section 6, 5th Floor, Main Office Telephone (416) 965-6285

Branch Director	M. R. Garrett	W-5620.....6287
CONSERVATION AUTHORITIES SECTION		
Manager	R. D. Hunter	W-5620.....6285
Supervisor, Water and Related Land Management	G. S. Sardesai	W-5620.....6275
Planning Systems Co-ordinator	T. E. Farrell	W-5620.....6286
Supervisor, Program Implementation and Evaluation	G. W. Price	W-5620.....6285
Head, Conservation and Recreation Land Mgmt. Program	R. J. Dickie	W-5620.....1573
Financial Services Co-ordinator	(Vacant)	W-5620.....7694
Special Employment Co-ordinator	Mrs. S. E. Court	W-5641.....1799
Librarian	Miss A. Perrigo	W-5641.....4481
Administrative Assistant	Mrs. D. Green	W-5620.....6270
TECHNICAL SERVICES SECTION		
Manager	R. B. Chang (acting)	W-5620.....6295
Supervisor, Streamflow Forecast Centre	P. N. Gryniewski	W-5636.....6292
Head, Hyrdometeorological Unit	R. A. Fox	W-5636.....6293
Flood Emergency Co-ordinator	L. J. Balogh	W-5636.....6277
Senior Policy Advisor, Water Management	R. P. Milligan	W-5620.....6281
Supervisor, Models and Consultative Services	R. M. Odell (acting)	W-5620.....1271
Head, Model Development	J. Y. Ding	W-5641.....1271
Head, Coastal Zone Management	D. L. Strelchuk	W-5620.....1271
Flood Damage Reduction Program Co-ordinator	Mrs. C. T. Kowalyk	W-5620.....6281

GRANTS TO CONSERVATION AUTHORITIES
UNDER THE CONSERVATION AUTHORITIES ACT

in years ending March 31

Year	Administration	Water and Related Land Mgmt.	Conservation and Recreation Land Mgmt.	Lake Ontario Waterfront	Total
1980	$4,756,983	$20,466,353	$3,404,736	$1,530,000	$30,158,072
1981	5,202,220	27,724,128	3,436,411	1,500,342	37,863,102
1982	5,517,581	26,496,443	2,953,315	1,469,780	36,437,119
1983	6,591,399	26,693,614	3,130,218	1,574,000	40,989,231
1984	7,098,874	26,852,944	3,751,372	-	37,703,190

AVIATION AND FIRE MANAGEMENT CENTRE

Box 310, Sault Ste. Marie, Ontario P6A 5L8
Telephone (705) 942-1800 Telex 067-77166, 067-77134

Director	J. F. Goodman	(705) 942-1800
Co-ordinator, Management & Planning	G. E. Doan	1800
Finance and Administration Spvr.	W. A. Sinclair	1800
Purchasing Officer	E. M. Esson	1800
Fire Management Section		
Assistant Director, Fire	R. G. Elliott	1800
Provincial Fire Operations	J. G. Minor, Spvr	1800
Research & Development	R. J. Drysdale, Spvr	1800
Fire Management Education Co-ordinator	R. B. Little	1800
Assistant Director, Air	R. Kincaid	1800
Chief Pilot	A. L. Stewart	1800
Maintenance Superintendent	G. Willoughby	1800
Assistant Supt. Maintenance		
Airframe Section	(vacant)	1800
Engine Section	P. F. Holder	1800
Quality Control Inspector	J. S. Denley	1800
Communications Supervisor	H. Kling	1800
Flight Ops. Officer Malton Airbase	W. C. Clarke	(416) 678-1177

FOREST FIRE RECORD

Areas in hectares

Year	Damage $	Private Property Damage $	Area Burned Over			Number of Fires	Area per Fire
			Crown	Private	Total		
1917	-	-	-	-	155,466	1,110	140
1918	-	-	-	-	12,210	965	12
1919	-	-	-	-	373,186	1,780	210
1920	-	-	-	-	145,222	1,287	113
1921	-	-	-	-	303,326	1,269	239
1922	-	-	-	-	140,099	1,021	151
1923	-	-	-	-	857,995	1,343	639
1924	-	-	-	-	55,091	851	69
1925	-	-	-	-	76,705	1,149	67
1926	-	-	26,664	9,100	35,764	1,110	32
1927	-	-	9,216	5,248	14,464	924	16
1928	-	-	39,026	1,598	40,624	536	76
1929	-	-	246,353	6,836	253,189	1,550	163
1930	-	-	144,688	143,371	288,059	1,402	206
1931	-	-	42,843	13,120	55,963	1,851	30
1932	-	-	253,558	21,232	274,790	2,073	133
1933	-	-	131,537	10,086	141,623	1,919	74
1934	-	-	64,891	15,493	80,384	1,568	51
1935	-	-	74,090	27,309	101,439	1,309	77
1936	-	-	466,957	44,741	511,698	2,264	226
1937	-	-	81,701	9,251	90,952	1,453	63
1938	-	-	38,918	17,028	55,946	1,292	43
1939	-	-	10,558	1,218	11,776	961	12
1940	-	-	40,869	8,346	49,215	1,014	49
1941	-	-	109,991	159,751	269,742	1,265	213
1942	-	-	31,448	14,571	46,019	1,224	38
1943	-	-	13,543	7,831	21,374	624	34
1944	-	-	29,635	38,713	68,348	1,137	60
1945	-	-	7,283	12,348	19,631	966	20
1946	-	-	18,072	12,995	31,877	1,739	18
1947	-	-	15,416	18,591	34,007	1,393	24
1948	-	-	345,917	65,806	411,723	2,036	202
1949	-	-	16,427	7,880	24,307	1,834	13
1950	55,148	103,682	5,343	9,541	14,884	985	15
1951	389,447	56,389	39,118	1,854	40,972	904	45
1952	29,504	31,347	2,940	2,087	5,027	1,095	4
1953	393,874	81,778	18,016	5,782	23,508	1,520	16
1954	406,241	15,650	14,615	7,518	22,133	881	25
1955	3,591,680	184,940	150,118	10,309	160,427	2,252	71
1956	3,068,152	22,319	89,768	1,777	91,545	1,017	90

Year	Damage $	Private Property Damage $	Area Burned Over			Number of Fires	Area per Fire
			Crown	Private	Total		
1957	463,059	113,751	9,814	9,065	18,879	1,671	11
1958	311,503	97,036	10,337	4,496	14,833	1,558	10
1959	22,041	20,757	1,044	1,093	2,137	1,029	2
1960	438,094	56,442	11,813	888	12,701	956	13
1961	31,989,802	152,639	477,894	1,549	479,433	1,305	367
1962	74,748	99,165	3,069	2,517	5,586	1,521	4
1963	706,888	39,932	16,467	6,251	22,718	1,885	12
1964	500,296	19,792	9,090	2,291	11,381	1,829	6
1965	386,850	254,105	6,068	1,987	8,055	1,218	6
1966	71,521	49,457	3,421	2,413	5,834	1,921	3
1967	1,353,919	87,638	23,768	1,930	25,698	1,465	17
1968	4,174	54,146	1,078	2,751	3,829	1,219	3
1969	134,756	4,623	1,813	669	2,482	901	3
1970	1,323,041	28,815	-	-	23,527	1,239	18
1971	462,064	75,875	-	-	14,649	1,790	8
1972	1,081,876	47,446	-	-	32,029	1,604	20
1973	11,944	121,900	2,417	1,190	3,607	1,111	3
1974	12,063,428	239,384	522,641	1,346	523,987	1,625	323
1975	683,726	340,414	11,226	5,630	16,856	3,146	5
1976	26,839,738	930,514	536,529	7,578	544,107	3,985	136
1977	11,190,900	252,565	411,752	4,564	416,316	2,049	203
1978	165,267	139,386	7,040	483	7,523	940	8
1979	2,310,161	60,032	63,322	393	63,715	1,564	41
1980	72,094,096	3,254,443	524,893	35,847	560,740	1,779	315
1981	9,171,418	60,906	173,479	5,994	179,473	1,656	108
1982	116,695	71,068	2,555	1,337	3,892	1,396	3
1983	15,230,649	352,210	442,156	1,499	443,655	2,244	198

1983 FOREST FIRES BY DISTRICT

District	Number of Fires	Hectares Burned Over	ha per Fire
Dryden	74	350.8	4.7
Fort Frances	48	648.9	13.5
Ignace	48	35.6	.7
Kenora	146	85,090.6	582.8
Red Lake	191	227,720.6	1,192.3
Sioux Lookout	171	51,401.7	300.6
Atikokan	36	5.5	.2
Geraldton	107	73,216.0	684.3
Nipigon	94	572.5	6.1
Terrace Bay	46	88.4	1.9
Thunder Bay	91	110.9	1.2
Chapleau	39	984.0	25.2
Cochrane	25	163.8	6.6
Gogama	22	326.5	14.8
Hearst	28	12.3	.4
Kapuskasing	24	25.5	1.1
Kirkland Lake	24	44.1	1.8
Moosonee	14	1,809.6	129.3
Timmins	12	13.0	1.1
Blind River	47	72.8	1.5
Espanola	46	21.5	.5
North Bay	76	102.9	1.4
Sault Ste. Marie	31	39.9	1.3
Sudbury	218	175.3	.8
Temagami	46	19.3	.4
Wawa	52	65.4	1.3
Algonquin Park	53	40.0	.8
Bancroft	32	48.3	1.5
Bracebridge	50	35.7	.7
Minden	57	94.8	1.7
Parry Sound	96	81.7	.9
Pembroke	66	39.6	.6
Carleton Place	20	12.7	.6
Tweed	86	174.5	2.0
Huronia	12	5.9	.5
Lindsay	8	3.1	.4
Owen Sound	8	.9	.1
TOTAL	2,244	443,654.6	197.7

1983 FOREST FIRES BY MONTH

Month	Number of Fires	Hectares Burned Over	ha per Fire
March	16	25.4	1.6
April	112	285.2	2.6
May	170	959.5	5.6
June	290	71,086.3	245.1
July	601	22,145.4	36.9
August	743	288,528.6	388.3
September	302	60,607.0	200.7
October	10	17.2	1.7
TOTAL	2,244	443,654.6	197.7

DETECTION OF FOREST FIRES

Agencies	1978	1979	1980	1981	1982	1983
Towers	0	0	1	0	0	0
Ministry Aircraft	136	420	484	394	230	595
Total Organized Detection	136	420	485	394	230	595
Public	750	875	1,026	1,062	1,038	1,277
Other Aircraft	54	269	268	200	128	372
Total Random Detection	804	1,144	1,294	1,262	1,166	1,649
Total Fires	940	1,564	1,779	1,656	1,396	2,244
Percentage Organized Detection	14	27	27	24	17	27

SIZES OF FOREST FIRES

Area Burned Over	1983
Up to .16 hectares	1,173
Over .16 to 4.0 hectares	844
Over 4.0 to 40.5 hectares	120
Over 40.5 to 202.3 hectares	33
Over 202.3 hectares	74
Total Fires	2,244

PROSECUTIONS

Actions re: Forest Fires	1978	1979	1980	1981	1982	1983
Prosecutions	27	24	178	46	72	89
Convictions	27	14	171	40	68	82

CAUSES OF FOREST FIRES - I

General Causes	1978	1979	1980	1981	1982	1983
Recreation	359	407	239	493	517	494
Resident	91	90	232	150	224	181
Incendiary	35	24	34	59	39	48
Railways	147	169	233	153	160	161
Industry (Forest)	19	21	26	36	11	36
Industry (Other)	21	28	15	38	22	25
Miscellaneous (Known)	87	101	160	209	156	178
Unknown	16	28	47	33	30	31
Lightning	165	696	793	485	237	1,090
Total Fires	940	1,564	1,779	1,656	1,396	2,244

CAUSES OF FOREST FIRES - II

Source of Ignition	1978	1979	1980	1981	1982	1983
Smoking Materials	171	212	173	285	323	250
Camp Fires	186	186	117	251	243	274
Matches	80	65	87	109	105	94
Fireworks	1	1	-	2	1	2
Explosives	-	-	-	2	-	1
Fusee	2	12	4	10	9	3
Prescribed Burning	2	3	-	3	3	2
Dump Ashes, Coals	5	/	/	6	9	7
Burning Grass	17	23	74	46	73	38
Burning Brush	39	22	35	36	37	52
Burning Rubbish	15	13	38	17	44	31
Burning Garbage Dump	8	18	33	15	23	34
Burning Bulldozed Pile	-	2	3	4	-	3
Burning Sawdust Pile	-	2	1	2	2	-
Burning Ties	11	10	14	16	19	9
Burning Right-of-Way	3	5	9	10	20	9
Locomotive, Diesel	39	37	48	38	27	35
Locomotive, Steam	-	-	-	-	-	-
Brake Shoe	66	64	101	47	44	61
Overheated Journal Box	-	2	6	2	-	2
Rail Grinding	-	-	-	-	-	13
Power Saw	1	1	7	7	2	3
Mechanical Equip. (Other)	30	18	34	49	34	30
Mechanical Equipment (Scarification)	-	-	-	-	-	9
Power Line (Short)	15	15	17	21	15	32
Sparks from Chimney	-	3	2	-	2	1
Sparks from Burner	1	3	2	1	1	1
Structural Fires	11	9	10	11	11	16
Miscellaneous (Known)	19	22	51	54	23	26
Unknown	54	113	114	129	91	116
Lightning	164	695	792	483	235	1,090
Total Fires	940	1,564	1,779	1,656	1,396	2,244

CAUSES OF FOREST FIRES - III

Responsible Groups	1978	1979	1980	1981	1982	1983
RECREATION						
Fishermen	110	138	81	184	158	161
Hunters	69	13	4	25	16	13
Canoeists	17	27	13	23	45	37
Campers	55	40	41	48	61	69
Picnickers	7	11	10	10	14	20
Berry Pickers	48	98	39	105	141	91
TRAVELLERS						
Car Passengers	38	39	70	96	76	61
Hikers	17	22	10	28	25	28
Train Passengers	-	2	-	1	-	-
Guided Parties	1	-	1	2	2	-
RESIDENTS						
Farmers	14	11	27	18	26	26
Rural Residents	47	47	116	88	138	103
Urban Residents	4	5	15	8	12	13
Private Cottagers	27	18	45	32	34	44
Resort Owners	1	1	-	5	2	-
Indians (on Reserves)	5	15	21	16	14	34
VOCATION						
Trappers	2	-	-	1	-	-
Prospectors	-	2	-	2	1	2
Timber Cruisers (not MNR)	-	-	-	-	-	-
Survey Parties	-	2	-	-	-	-
Military	1	-	-	1	1	-
EMPLOYEE OF						
Woods Industry	16	21	21	31	12	33
Mining	1	1	2	9	1	4
Pipeline	-	-	-	-	-	-
Hydro	4	5	3	3	2	4
Telephone	1	-	1	1	-	1
Highway or Road	-	3	2	1	1	1
R. R. Section Crew	15	8	24	22	39	25
R. R. Train Crew	21	9	32	24	24	21
R. R. Work Crew	111	147	167	102	94	110
Other Industry	9	6	12	17	12	9
Natural Resources	5	7	10	34	17	6
Other Prov. Government	1	-	-	1	-	1
Federal Government	1	1	-	-	-	1
Municipality	-	8	5	3	6	5
MISCELLANEOUS						
Children	48	49	60	77	68	76
Youth Camps	-	-	1	3	-	6
Miscellaneous (Known)	28	26	50	40	24	66
Unknown	51	87	103	112	94	83
Total Human-Caused Fires	775	869	986	1,173	1,160	1,154
Percentage of All Fires	82	56	55	71	83	51

AIR SERVICE SUMMARY - I

Hours flown in years ending March 31

Year	Fire Ranging	Timber	Fish and Wildlife	Surveys	Lands	Parks
1979	3,340	1,290	4,731	182	735	662
1980	2,000	1,650	2,500	345	1,000	600
1981	3,000	1,674	2,473	342	1,065	609
1982	1,973	1,760	2,600	360	1,120	640
1983	3,037	1,670	2,460	425	1,217	530
Total 1924-83	242,303	40,593	112,111	3,875	17,612	14,286

Year	Research	Inter-Ministry	Photo	Mercy Flights	Misc.	Total
1979	105	2,652	578	25	364	14,633
1980	400	1,550	550	30	4,525	15,150
1981	380	1,372	621	19	3,662	15,217
1982	400	1,647	656	58	4,789	16,003
1983	456	1,885	640	13	2,855	15,845
Total 1924-83	10,339	33,570	7,542	1,894	175,617	660,399

AIR SERVICE SUMMARY - II

in years ending March 31

Year	Mercy Flights	Passengers Carried	Loads Carried Tons	Metric Tons
1979	3	27,937	806.74	888
1980	13	27,336	1,023.04	1,132
1981	10	25,480	801.06	883
1982	28	28,485	988.00	1,089
1983	8	30,267	2,069.17	2,280

ADMINISTRATION DIVISION

Room W-6345, Main Office Telephone (416) 965-7106

Assistant Deputy Minister.....	M. Mogford.....	W-6345.....7106
Administrative Assistant.....	Mrs. W. Paquette.....	W-6344...3-2005
Secretary.....	Mrs. E. Lynch.....	W-6345.....7106
Finance and Administration Group		
Executive Co-ordinator.....	D. J. Johnstone.....	W-6347.....6148
Affirmative Action		
Program Co-ordinator.....	J. Mizanski (acting)....	W-6441.....5663
Communications Services Branch		
Director.....	T. Coleman.....	W-5352.....3315
Personnel Services Branch		
Director.....	H. B. Farrant.....	W-4530.....3825
Legal Services Branch		
Director.....	R. G. Jones.....	W-6420.....2748
Management, Planning and Analysis Branch		
Director.....	P. Bryant.....	W-6350.....4143

Administration Division

COMMUNICATIONS SERVICES BRANCH

Room W-5340, Main Office Telephone (416) 965-2756

Branch Director	T. E. Coleman	W-5352...5-3315
Secretary	Miss M. Goh	W-5340...5-3315
Communications Policy Co-ordinator	P. Andrews	W-5340...5-2756
Senior Communications Planner	G. Merchant (acting)	W-5441...3-2958
Northern Ontario Communications Co-ordinator	K. Robertson	W-5340...5-2756
Information Services Section	Ms. V. Chavossy, Mgr	W-5340...5-2756
French Language Policy	R. Redard	W-5340...3-2026
French Language Writer	F. Blais	W-5340...3-2026
Writing Co-ordinator	Ms. M. Welch	W-5340...3-2756
Media Relations Officer	C. Ross	W-5340...5-2756
Magazine Editor	Mrs. A. Erland	W-5340...5-2758
Senior Travel Counsellor	Ms. C. Mahoney (acting)	W-3304...5-3081
Fisheries Information	Mrs. K. Jones	W-3304...5-7883
Wildlife Information	Mrs. D. Pearson	W-3304...5-4251
Creative Services Section	W. Yetman, Mgr	W-5440...5-2780
Secretary		W-5440...5-2780
Exhibits & Displays Unit	Mrs. E. H. Brown, Spvr.	W-5440...5-2780
Exhibits Assistant	Mrs. S. Cole	W-5440...5-2780
Publications Services Unit	J. R. Grayston (acting)	W-5440...5-2780
Publications Editor	Ms. M. Reid	W-5440...5-2780
Graphic Designer	A. Gokhan	W-5440...5-2780
Audio Visual Unit	A. Campeau, Spvr.(acting)	W-5440...3-1325
Photographers	W. Lanning	W-5440...3-1325
	Miss H. Bickle	W-5440...3-1325
Photo Library	Miss P. Hancock	W-5341...5-2758
Film & Audio-visual Consultant	L. Walton	W-5440...3-1325
Advertising & Marketing Unit Co-ordinator	Ms. P. Purves	W-5441...3-2956
Advertising Officer	C. Smith	W-5441...3-2957

Administration Division

PERSONNEL SERVICES BRANCH

Room W-4520, Main Office Telephone (416) 965-3825

Branch Director.....	H. B. Farrant.....	W-4530...3825
M.O.S.S. Unit Manager.....	E. Polonoski.....	W-4601...7240
Staffing Policy & Branch Administration Manager.....	Mrs. F. Cardwell.....	W-4531 3-2692
Human Resources, Planning & Development Manager.....	R. Brayshaw.....	W-4422...1468
Compensation & Staff Relations Manager.....	R. Gordon.....	W-4528...6091
Occupational Health & Safety Section Manager.....	A. B. Shipston.....	W-5645...2735

PERSONNEL SERVICES BRANCH

Total Staff as of March 31, 1984

	Regular	Probationary	Unclassified	Total
Main Office	859	28	401	1,288
Field Office	3,089	21	1,200	4,310
TOTAL	3,948	49	1,601	5,598

Total Number of Positions	4,339
Total Number of Staff	3,997
Total Number of Vacancies	342
New Employees Hired 1983/84	57
Management Staff	1,014
Executive Staff	42
Bargaining Unit Staff	2,900
Position Excluded Staff	41
Total	3,997
Deceased	11
Transferred	18
Released	1
Resigned	85
Dismissed	2
Retired	156
Total	273

STAFF SUMMARY

at March 31, 1984

	1979	1980	1981	1982	1983	1984
Regular Staff	3,919	4,088	4,060	4,093	4,163	3,948
Probationary Staff	456	341	322	203	141	49
Unclassified Staff	1,698	1,938	1,636	1,565	1,380	1,601
TOTAL	6,073	6,367	6,018	5,867	5,684	5,598
Main Office Staff	930	917	880	863	917	887
Field Office Staff	3,445	3,512	3,502	3,439	3,387	3,110
New Employees	862	316	306	140	160	57
Deceased	8	11	10	9	12	11
Superannuated	97	89	99	45	78	156
Transferred	32	38	1	36	17	18
Resigned	146	199	165	81	73	85
Dismissed	0	3	3	1	1	2
Released	4	1	5	0	1	1
Miscellaneous	0	0	29	0	1	0
Total Separations	287	341	312	172	183	273
Junior Rangers	1,968	1,800	1,736	1,736	1,636	1,716

MANAGEMENT GROUPS	
Administrative	226
Clerical	12
Operational	15
Professional	273
Technical	488
Total	1,014
Executive Compensation Plan	42
Position Excluded	41

BARGAINING UNIT CATEGORIES	
Administrative Services	74
Scientific & Professional	432
Technical Services	1,315
Office Services	331
Clerical Services	449
Maintenance Services	237
General Operational Services	62
Total	2,900

Administration Division

LEGAL SERVICES BRANCH *

Room W-6420, Main Office Telephone (416) 965-2748

Director (acting).....	B. G. Jones.....	W-6420.....2748
Solicitors.....	S. B. Campbell.....	W-6420.....2748
	C. L. Cottle.....	W-6420.....2748
	M. M. Crystal.....	W-6420.....2748
	S. A. Klein.....	W-6420.....2748
	L. A. Low.....	W-6420.....2748
	C. E. Mansfield.....	W-6420.....2748
	D. A. Pigeon Bernotas...	W-6420.....2748
	J. Skala.....	W-6420.....2748
	T. N. Trow.....	W-6420.....2748
Prosecutions Officer.....	M. N. K. Toor.....	W-6420.....2748

* Legal Services Branch was transferred to the Attorney General on April 1, 1973 and was seconded to the Minister of Natural Resources on the same date.

LEGAL SERVICES

ending March 31, 1984

Regulations Prepared and Processed	Orders in Council	Legal Agreements
33	665	370

Note: The above figures are approximate.

LEGISLATION

The Acts administered by the Ministry are as follows:

LANDS AND WATERS GROUP

THE BEDS OF NAVIGABLE WATERS ACT (sometimes referred to as the "Cochrane Act") is declaratory legislation relating to title in the beds of navigable waters. It followed the decision in the 1911 case of Keewatin Power versus The Town of Kenora. By the Act, the beds are deemed not to have passed to the grantee of bordering Crown land in the absence of an express grant.

THE ONTARIO GEOGRAPHIC NAMES BOARD ACT provides for the establishment of a Geographic Names Board for Ontario having the duty to gather information respecting the names of places and geographical features, make recommendations thereon, collaborate with the Canadian Permanent Committee on Geographic Names, and provide information to government departments, etc. The Minister may approve a recommended name and thereupon it shall be used by all government departments and agencies in the preparation of maps and other publications.

THE ONTARIO HARBOURS AGREEMENT ACT, 1962-63, confirms on behalf of Ontario the agreement between Ontario and Canada establishing the harbours which were public harbours at Confederation, providing that mines and minerals therein are administered by Ontario and confirming grants and quit claims listed therein. The federal harbours are Amherstburg, Belleville, Brockville, Chatham, Collingwood, Fort William, Gananoque, Goderich, Kincardine, Kingston, Kingsville, Leamington, Oshawa, Owen Sound, Penetanguishene, Port Arthur, Port Burwell, Port Hope, Port Stanley, Prescott, Rondeau Bay, Sarnia, Sault Ste. Marie, Southampton, Toronto, Whitby and Windsor.

THE PUBLIC LANDS ACT provides for: (1) A Public Agricultural Lands Committee to recommend on agricultural lands and their settlement, replacing the regulations on this subject; (2) The disposition of Crown land for a variety of purposes by sale, lease or licence, and by auction or tender; (3) The management of Crown land by the Ministry by zoning for land use, setting apart for public use, research, etc., and through agreements with municipalities on beaches and water lots; (4) The administration of roads on Crown lands including the designation of public forest roads and agreements with occupiers of private forest roads respecting the use by the public of private forest roads; (5) The administration and control of the construction and maintenance of dams; (6) The granting of water powers and privileges.

THE SURVEYORS ACT deals with the Association of Ontario Land Surveyors and the rules governing membership and conduct. The Minister or his appointee and the Surveyor-General are members of the Council of Management.

THE SURVEYS ACT defines the system of surveys and the rules for surveyors. The Minister orders surveys made on his volition or upon application to settle disputes or lost lines, etc,; and hearing evidence, he confirms the surveys, with or without amendment. His decision is subject to appeal to a judge of the Supreme Court.

THE NORTH GEORGIAN BAY RECREATIONAL RESERVE ACT, 1962-3, establishes the North Georgian Bay Recreational Reserve and provides for the planning and development thereof and the appointment of a committee to advise the Minister thereon.

THE MINING ACT with respect to: the administration of public lands for mining purposes; the issuing of licences and leases relating to exploration and drilling for, and the production of, minerals and oil and natural gas; the staking and recording of mining claims; and the rights of licensees and lessees under the Act. An acreage tax is levied under this Act. (See under Mineral Resources Group).

THE BEACH PROTECTION ACT prohibits the removal of sand from the bed, bank, beach, shore or waters of any lake, river or stream in Ontario except under the authority of a licence issued under the Act. Licencees may be required to pay a fixed sum per yard of sand removed from property of the Crown.

THE CANADA COMPANY'S LAND ACT, 1922, empowers the Crown to sell and convey to purchasers of lands from the Canada Company the mineral rights in the lands.

THE LAKES AND RIVERS IMPROVEMENT ACT deals with: the construction, repair and use of dams; timber driving; and timber slide companies and tolls. The Minister is charged with the responsibility of settling disputes between conflicting users under certain circumstances. An officer may be appointed to regulate the use of waters or works.

THE CONSERVATION AUTHORITIES ACT provides for the establishment of conservation authorities for the purpose of establishing and undertaking in the area over which they are given jurisdiction, programs designed to further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals.

FOREST RESOURCES GROUP

ARBOREAL EMBLEM ACT, 1984 adopts the Eastern White Pine as the arboreal emblem of the Province of Ontario.

THE CROWN TIMBER ACT enables the granting of the following four types of licences to cut Crown timber, a licence based on a call for tenders, a licence to salvage timber, a licence for areas that do not exceed 64.75 hectares (160 acres), and a licence approved by Order in Council for large areas.

The act also enables the Minister to enter into comprehensive forest management agreements with members of the forest industry to ensure that forests under the agreements are harvested and regenerated to produce successive crops of timber on a sustained yield basis.

Crown Management Units may be established under the Act and agreements entered into for the supply of Crown timber from such units. Under this arrangement, the party to the agreement does not have exclusive rights in a specific area until a licence is granted to him to fill his requirements for an operating season.

Crown dues and area charge are fixed by the regulations.

Other subjects dealt with are: forest management, operating and annual plans; examination of scalers and licensing of scalers; licensing of mills; penalties for wasteful practices, unauthorized cutting, removal of timber for scaling, and other violations; and protection of the Crown's interests through seizure of timber and a statutory lien for Crown charges.

THE FORESTRY ACT. Under this Act: (1) The Minister enters into agreements with landowners such as municipalities, conservation authorities and the National Capital Commission (Ottawa) to manage the forest lands; (2) Ministry tree nurseries are established and nursery stock is distributed; (3) Private forest reserves are set up on private lands with the consent of the owner; (4) The Minister, with the approval of the Lieutenant Governor in Council, may establish programs for the encouragement of forestry. At present, a managed forest tax reduction program has been established by the Minister.

THE SETTLERS' PULPWOOD PROTECTION ACT provides for the regulation of the sale and of the price of pulpwood cut from settlers' land.

THE SPRUCE PULPWOOD EXPORTATION ACT provides for the exportation under the authority of an Order-in-Council of unmanufactured spruce pulpwood from lands granted under special Acts which prohibit such export.

THE TREES ACT provides that, with the Minister's approval, municipalities may pass by-laws restricting and regulating the destruction of trees and appoint enforcement officers. Generally, by by-law, municipalities may acquire land for forestry purposes and enter into agreements with the Minister for the management of such lands and related matters.

THE WOODLANDS IMPROVEMENT ACT provides for the Minister to enter into agreementswith owners of lands suitable for forestry purposes and situate in a private forest management area for the planting of nursery stock or stand improvement.

THE WOODMEN'S EMPLOYMENT ACT authorizes the appointment of inspectors and the making of regulations respecting conditions in lumber camps. It also provides that Crown timber licensees are responsible for the acts and omissions of their jobbers and subcontractors who carry out operations.

THE WOODMEN'S LIEN FOR WAGES ACT provides a lien and a procedure to enforce such lien for persons performing labour on timber.

THE ALGONQUIN FORESTRY AUTHORITY ACT establishes a Crown corporation known as the Algonquin Forestry Authority to harvest Crown timber in Algonquin Provincial Park and public lands adjacent to the park, to sell the logs and also to carry out such forestry, land management and other programs and projects as the Minister of Natural Resources authorizes.

THE FOREST TREE PEST CONTROL ACT provides for the control of outbreaks of forest tree insects and diseases on private lands.

MINERAL RESOURCES GROUP

THE MINING ACT with respect to: the issuing and administration of exploratory licences and production leases for oil and natural gas on public lands in designated parts of Ontario; processing applications for exemptions from restrictions on foreig processing; refinery licences; and the regulation of mining operations conducted within Ontario except under Part IX. (Also see under Lands and Waters Group.)

THE PITS AND QUARRIES CONTROL ACT provides for the regulation of pit and quarry operations in designated parts of Ontario. Operations in designated areas must be licensed under the Act and are subject to periodic review to assure compliance with the provisions of the Act, the regulations and site plan.

THE PETROLEUM RESOURCES ACT sets forth licensing requirements for various aspects of oil and natural gas exploration, drilling and production and provides for the making of regulations respecting oil and gas conservation and the safe operation of drillin and production facilities.

THE MINING TAX ACT a revenue generating unit which offers incentives to mineral producers for exploration, production and processing in Ontario, imposes a profit ta on Ontario mines. The tax is assessed on the value of output of the mine at the pit' mouth determined in accordance with the provisions of the Act.

THE ONTARIO MINERAL EXPLORATION PROGRAM ACT provides incentives to encourage mineral exploration activities in the province by providing grants/tax credits equal to 25 per cent of eligible exploration expenses to prospectors, non-producing exploration companies and to individual investors and corporations not directly engaged in minin activities in order to stimulate the financing of mineral exploration.

THE INDUSTRIAL AND MINING LANDS COMPENSATION ACT provides for agreements between the owner or operator of a mine and the owner or lessee of any land for payment of compensation for any damage or injury resulting or likely to result to the land or t its use and enjoyment from the operation of the mine.

THE GAS AND OIL LEASES ACT sets out the procedure whereby a lessor under a gas or oi lease may, upon default by the lessee under the terms of the lease, obtain an order declaring the lease void.

OUTDOOR RECREATION GROUP

THE ENDANGERED SPECIES ACT provides for the conservation, protection, restoration and propagation of species of flora and fauna of the Province of Ontario that are threatened with extinction.

THE GAME AND FISH ACT deals with the management of wildlife resources; game animals; game birds (upland); fur-bearing animals; frogs; sale and rearing of game fish; and offences and enforcement. Regulations made under the Act establish open seasons for hunting and trapping; bag limits; Crown game preserves; the licensing of hunters, trappers, guides, persons operating game bird hunting preserves, and persons selling game fish for stocking and human consumption; the regulating of dogs used in hunting, aircraft transporting hunters, and conduct of hunters (hunter safety); and farmer-hunter relations. The Game and Fish Hearing Board was established under the Act on November 15, 1973.

THE FISH INSPECTION ACT is complementary to the Federal Act.

THE FISHERIES ACT (CANADA) Ontario Fishery Regulations are made under this Act. They relate to open seasons for angling and commercial fishing and the licences required. The form of licences and the fees are prescribed under The Game and Fish Act.

THE FISHERIES LOAN ACT provides for loans to persons carrying on the business of commercial fishing or any other business dependent in whole or in part on the taking of fish from waters in which such taking has been prohibited by reason of the contamination of fish resulting from pollution of the water. Provision is made for federal-provincial agreements respecting the sharing of such loans.

THE FRESHWATER FISH MARKETING ACT (ONTARIO) complements the Freshwater Fish Marketing Act (Canada). Through these Acts and the federal-provincial agreement, the Freshwater Fish Marketing Corporation established under the Federal Act is the sole purchaser of commercial fish, as defined in the Federal Act, taken in that part of Ontario designated in the regulations, i.e., that part of Ontario westerly of longitude 86 degrees except the Territorial District of Rainy River but including that part of Lake of the Woods in the Territorial District of Rainy River. Sales to and purchases by persons for their own consumption or for consumption by persons or animals in the course of the purchaser's business are excepted.

THE WILD RICE HARVESTING ACT prohibits the harvesting of rice on Crown land except under the authority of a licence.

THE WOLF DAMAGE TO LIVESTOCK COMPENSATION ACT, 1972, provides for payment of compensation to the owners of livestock killed or injured by wolves.

THE MIGRATORY BIRDS CONVENTION ACT. Open seasons for migratory birds are set under this Act.

THE PROVINCIAL PARKS ACT provides for the establishment of provincial parks and their management and for certain employees having the authority of the O.P.P. in a provincial park. Advisory committees for one or more provincial parks may be appointed by the Minister with the approval of the Lieutenant-Governor in Council. Parks may be classified as a natural environment park, a nature reserve park, a wilderness park, a recreational park, a waterways park, or an historical park. Any of these classes may be zoned with controlled use in zones.

Mining is prohibited in provincial parks except as provided in the regulations. The regulations on mining were revoked in 1956 but rights and interest existing at that time were preserved.

Hunting is prohibited in provincial parks except as provided in the regulations under the Game and Fish Act or where the prohibition is removed by designation of the Lieutenant-Governor in Council under the Provincial Parks Act. This does not apply to the Townships of Bruton and Clyde (added to Algonquin Provincial Park by a Special Act).

Concession leases are granted under the Act. The province calls for tenders for buildings and facilities.

Vehicle admission charge is $2.50 per day or $25.00 for the season. Campsite charges are $6.50 per day, or $7.00 per day where comfort station facilities are available, and $8.50 per day for campsites with electrical power. The charge for an extra car on a campsite is $3.00 per day. On unorganized campsites in park interiors the charge is $2.00 per person or $6.50 per interior campsite.

The above fees reflect those charged during peak periods. They may vary, depending on location and time of year.

This Act does not apply to any park under the management of the Niagara Parks Commission, the St. Lawrence Parks Commission or the St. Clair Parkway Commission.

THE WILDERNESS AREAS ACT was passed on March 26, 1959, to preserve areas having some unique feature. Development or utilization or the natural resources in an area more than 260 ha (640 acres) in size is not affected by this Act.

THE PARKS ASSISTANCE ACT provides for the establishment of parks in municipalities or in territory without municipal organization. The Minister may with the approval of the Lieutenant-Governor in Council make grants not exceeding 50 per cent of the cost of acquiring land and developing such parks. The parks established under the Act are to be maintained and operated in a manner complementary to provincial parks.

The following are newly established parks:
Lady Evelyn-Smoothwater Provincial Park, Kesagami Provincial Park, Opasquia Provincial Park, Wabakimi Provincial Park and Woodland Caribou Provincial Park.

AVIATION AND FIRE MANAGEMENT CENTRE

THE FOREST FIRES PREVENTION ACT applies to the seven fire regions set up by regulation. The fire season from April 1st to October 31st, may be extended by regulation. Fire permits are required during the fire season to (a) start fires in a fire region except for fires set out for cooking or warmth or to (b) ignite fireworks in or within 300 m of a forest or woodland. Work permits are required at any time of the year for carrying on any logging, mining, industrial operation or clearing in or within 300 m of a forest or woodland. Areas may be established as restricted fire zones in which fires for cooking or warmth will be restricted to portable stoves and barbecues or as restricted travel zones in which a travel permit will be required except on public roads, cities, towns, villages, police villages, supervised camping grounds and water adjacent thereto. The Minister may declare emergency areas and may make orders for suppression and the safety and evacuation of persons. The Minister may enter into agreements with Canada, any province, any federal or provincial agency or municipality respecting the prevention and control of forest fires. The regulations establish fire precautions.

GENERAL

THE MINISTRY OF NATURAL RESOURCES ACT effective as of April 1, 1972, created the new Ministry of Natural Resources by amalgamating the former Department of Lands and Forests and Department of Mines and Northern Affairs and repealed the provisions of a number of Acts on which the departments depended for administrative authority. Effective October 30, 1973, the Act provides for the appointment of a Mining and Lands Commissioner and advisory committees.

THE LAKE OF THE WOODS CONTROL BOARD ACT, 1922, is complementary to a Federal Act of 1921. It deals with the regulation of the water levels of the Winnipeg River, the English River, Lac Seul and Lake St.Joseph. The Board was created following a report in 1917 by the International Joint Commission which was established under a treaty made in 1909 between the United States and Great Britain. The membership of the Board consists of a Federal representative and one from Manitoba and two from Ontario. One Ontario member is appointed by the Ontario Hydro. The other is R. M. Odell, Head, Consultative Services, Conservation Authorities and Water Management Branch, Ministry of Natural Resources, with R. B. Chang as alternate member.

The Board has the duty to secure severally and at all times the most dependable flow and the most advantageous and beneficial use of the Winnipeg and English Rivers and, for the purpose, to regulate the overflow of:

(a) Lake of the Woods, to levels recommended by the International Joint Commission as agreed by Canada and the United States;
(b) Lac Seul, to levels recommended by the Board and approved by the Lieutenant-Governors in Council of Ontario and Manitoba and to regulate the flow into Lac Seul through the Lake St. Joseph diversion.
(c) Winnipeg River, between its junction with the English River and Lake of the Woods, and the English River between its junction with the Winnipeg River and Lac Seul; and
(d) Other waters of the watershed of the Winnipeg River as are placed under its jurisdiction by the Governor-General in Council and the Lieutenant-Governors in Council of Ontario and Manitoba.

THE LAC SEUL CONSERVATION ACT, 1928, provides for the execution of an agreement between the Minister of Lands and Forests and the Government of Canada regarding the construction of a conservation dam at the outlet of Lac Seul.

THE OTTAWA RIVER WATER POWERS ACT, 1943, ratifies and confirms an agreement between the Province of Ontario, the Province of Quebec, the Hydro-Electric Power Commission of Ontario and the Quebec Streams Commission respecting the development of water power on the Ottawa River.

THE SEINE RIVER DIVERSION ACT, 1952, confirms the partial diversion of the Seine River and authorizes the completion and operation of the diversion by Steep Rock Iron Mines Limited.

THE NATIONAL RADIO OBSERVATORY ACT, 1962-3, provides for the transfer of administration and control of certain public lands in the Township of White, District of Nipissing, to Canada for the maintenance and operation of a national radio observatory.

THE GANANOQUE LANDS ACT, 1961-2, vests certain lands in the town of Gananoque in the Crown and authorizes the sale of encroachments to adjoining owners for a fee of $50.00 and the granting of the balance of the land.

THE ALGONQUIN PROVINCIAL PARK EXTENSION ACT, 1960-1, adds the public lands in the Geographic Townships of Bruton and Clyde in the Provincial County of Haliburton to the park, subject to hunting.

THE MINERAL EMBLEM ACT, 1975, adopts the amethyst as the mineral emblem of the Province of Ontario.

THE MANITOBA-ONTARIO LAKE ST. JOSEPH DIVERSION AGREEMENT AUTHORIZATION ACT, 1958, provides for entry by Ontario and The Hydro-Electric Power Commission of Ontario into an agreement with Manitoba and The Manitoba Hydro-Electric Board in respect of the diversion of waters into the Winnipeg River and electrical power generated from such waters in Ontario and Manitoba.

MINING AND LANDS COMMISSIONER

Box 330, 24th Floor, 700 Bay St. Telephone (416) 965-1824
Toronto, Ontario M5G 1Z6

Commissioner..... G. H. Ferguson, Q.C.

Administrative Assistant..... J. K. Kinsella

JUDGEMENTS, ORDERS AND REPORTS

Year	Extensions for Work and Lease	Extensions For Tagging	Special Renewals of Licences	Misc.	Total
1979	858	-	63	73	994
1980	1,046	1	74	60	1,181
1981	1,338	1	73	75	1,487
1982	1,430	-	80	154	1,664
1983	1,411	-	74	119	1,604
1984	1,703	1	85	191	1,980

PROJECTED REVENUE FROM EXTENSION ORDERS

Year	No. of Claims Prior To Default	Amount	No. of Claims Relief from Forfeiture	Amount
1979	8,147	$40,735	871	$ 8,710
1980	8,434	42,170	694	6,940
1981	11,957	59,785	1,329	13,290
1982	13,692	68,460	1,801	18,010
1983	13,675	68,380	1,863	18,630
1984	19,960	99,800	3,714	37,140

HEARINGS UNDER STATUTES OF THE MINISTRY

Year	Beach Protection Act	Conservation Authorities Act	Lakes & Rivers Improvement Act	Mining Act	Mining Tax Act	Other	Total
1979	-	11	1	9	3	-	24
1980	-	11	1	6	1	-	19
1981	-	4	1	13	-	-	18
1982	-	17	-	36	1	1	55
1983	-	16	1	27	-	-	44
1984	-	12	2	35	-	-	49

MATTERS WITHDRAWN, ABANDONED OR TRANSFERRED TO SUPREME COURT

1979	-	8	-	-	1	-	9
1980	-	12	4	4	1	-	21
1981	-	1	-	3	-	-	4
1982	-	9	-	3	-	-	12
1983	-	3	-	9	-	-	12
1984	-	4	-	6	-	-	10

Administration Division

FINANCE AND ADMINISTRATION GROUP

Room W-6347, Main Office Telephone (416) 965-6148

Executive Co-ordinator.....	D. J. Johnstone.....	W-6346.....6148
Secretary.....	.....	W-6346.....6147

SYSTEMS SERVICES BRANCH

Main Office, Room W-4429 (416) 965-2750

Director.....	J. H. Findeis.....	W-4429.....2750
Systems Co-ord. Mgr.....	C. K. Moulson.....	W-4426.....5674
Manager, Data Base Co-ordinator	L. Bailey.....	W-4427...3-1327
Operations Supervisor.....	D. Trentadue.....	W-5611.....3794
Major Systems Supervisor.....	L. Davidson.....	W-5611.....3790
Advanced Technology Systems Senior Analyst.....	R. Orawski.....	W-4420...3-2391
Technical Support Supervisor.....	M. Zillman.....	W-4430...3-2392

INTERNAL AUDIT SERVICES BRANCH

Room W-4633, Main Office Telephone (416) 965-4087

Branch Director.....	A. A. Ward.....	W-4637.....4087
Main Office Audit Section Audit Manager.....	D. L. Lay.....	W-4634.....4087
Northern Audit Section Box 5000 Thunder Bay, P7C 5G6 Audit Manager.....	N. D. Nurse.....	(807) 475-1211 (IC 844)
Sault Ste.Marie sub-office 875 Queen Street East Sault Ste.Marie, P6A 2B3 Senior Auditor.....	W. C. Johnstone.....	(705) 949-1231 (IC 842)
Southern Audit Section c/o District Office Maple, L0J 1E0 Audit Manager.....	D. A. Dooling.....	(416) 832-2761 Ext.281

Administration Division

FINANCIAL RESOURCES BRANCH

Room W-4325, Main Office, Telephone (416) 965-2761

Director	M. W. Cox	W-4324...5-2761
Secretary	M. E. Adkin	W-4324...5-2761
Chief Accountant	I. A. Nott	W-4326...5-2761
Supv. Expenditure Control	R. McDougal	W-4321...5-1895
Supv. Financial Methods	G. Jarzabek	W-4328...5-1218
Supv. Financial Policy Dev.	E. V. Young	W-4340...5-1033
Supv. Financial Reporting & Claims	V. Ferrara	W-4321...5-1895
Accounting Operations Manager	L. P. Comeau	W-4322...5-2761
Supv. Accounting Section	C. Obelnycki	W-4441...5-2251
Supv. Accounts Payable Section	J. T. Tunnicliff	W-4303...5-2764
Supv. Licence Issuing Section	T. Headley	W-4342...5-2814
A/Supv. Payroll Section	S. Sprung	W-4341...5-2766
Supv. Revenue Section	S. A. Perry	W-4443...5-2770
Financial Planning & Program Evaluation Section Manager	A. P. Wormwell	W-6546...5-7182
Senior Program Officer	A. Harris	W-6545...5-7409
Planning Officer	S. Mathewson	W-6545...5-7182
Senior Program Officer	A. Ireland-Smith	W-6544...5-7182
Program Planning & Budget Section Manager	D. H. Cope	W-6540...5-9052
BILD/Special Empl. Co-ordinator	D. Cherry	W-4501...5-7182
Budget Supervisor	J. Heywood	W-6549...5-9052
Senior Adviser	J. Botterill	W-6543...5-7086
Group Adviser	P. King	W-6549...5-7086
A/Group Adviser	K. Stahl	W-6549...5-7086
Group Adviser	D. Sword	W-6549...5-7086
A/Division	A. M. Teder	W-4321...5-1895
Project Co-ordinator, Computerized Work Planning	L. Petterson	W-6549...5-9052

REVENUE AND EXPENDITURES

in years ending March 31

Year	Budgetary Revenue $	Budgetary Expenditure $
1980	202,825,624	279,799,068
1981	275,562,265	349,475,311
1982	160,546,904	363,253,018
1983	135,735,095	374,348,745
1984	149,669,629	407,490,465

LANDS REVENUE

in years ending March 31

Year	Water Power $	Crown Land Sales $	Crown Land Rentals $	Park Rentals & Fees $	Pits and Quarries Licences $	Land Use Permits $
1980	19,279,984	1,899,009	577,784	57,788	116,625	479,869
1981	19,158,930	2,936,644	754,447	131,733	114,125	478,788
1982	20,604,400	2,243,525	947,993	125,483	159,275	558,492
1983	23,613,132	1,690,312	994,362	-	162,750	647,007
1984	25,593,045	1,719,761	959,100	-	165,015	712,854

Year	Assignments & Extension Fees $	Cons. Authorities Federal Agreements $	Return of Grants $	Recovery Prior Years Land Acquisition $	Misc. $	Total $
1980	22,045	133,317	54,228	94,270	98,218	22,813,137
1981	85,131	413,588	69,325	2,243	270,350	24,415,304
1982	16,300	511,589	469,201	103,966	87,549	25,827,773
1983	20,453	1,103,543	148,277	2,791	115,146	28,497,773
1984	22,575	137,594	172,653	38,597	386,148	29,907,342

TIMBER REVENUE

in years ending March 31

Year	Stumpage Charges $	Timber Area Charges $	Nursery Tree Sales $	Agreement Forest $	Federal Agreement $	Misc. $	Total $
1980	42,729,326	5,471,287	235,525	635,368	26,344	86,385	49,184,235
1981	47,266,552	4,401,176	609,097	282,646	1,885	92,587	52,653,943
1982	38,204,534	4,437,802	818,152	354,783	9,751	68,697	43,893,719
1983	39,137,899	3,435,840	943,801	539,326	-	64,177	44,121,043
1984	46,754,081	4,625,266	606,385	586,724	5,763	67,840	52,646,059

MINING REVENUE

in years ending March 31

Year	Licences and Permits $	Mining Claims $	Sale of Mining Lands $	Rentals $	Royalties $
1980	103,787	362,937	6,860	948,112	1,539,814
1981	111,328	639,844	11	847,501	2,380,790
1982	319,952	537,731	3,191	582,818	2,250,102
1983	412,918	528,050	1,375	1,695,196	6,101,775
1984	569,477	661,066	3,003	732,129	4,660,987

Year	Taxes $	Forfeitures $	Laboratory Fees $	Rec. of Prior years Expenditure $	Federal Agreement $	Total $
1980	99,674,524	3,330	125,936	31,891	-	102,797,191
1981	161,061,781	4,060	108,408	-	-	165,153,723
1982	55,411,740	2,840	153,161	-	-	59,261,535
1983	26,178,380	1,980	163,410	-	1,187,031	36,270,115
1984	32,544,776	2,700	178,985	-	1,479,939	40,833,062

PROVINCIAL PARKS REVENUE

in years ending March 31

Year	Permits $	Campsite Permits $	Concessions Rental $	St. Lawrence Lic. & Permits $
1980	971,351	5,325,333	450,018	1,896,935
1981	935,283	5,585,691	477,926	1,931,825
1982	1,215,227	5,519,852	356,984	1,933,584
1983	1,195,392	6,555,071	402,132	-
1984	1,392,446	6,620,918	387,401	-

Year	Federal Agreement $	St. Clair Pkwy. Commission $	Misc. $	Total $
1980	1,337,144	115,000	100,850	10,196,631
1981	2,448,976	15,000	133,917	11,528,618
1982	1,572,055	18,000	188,964	10,804,666
1983	190,089	1,500	162,470	8,506,654
1984	14,879	-	155,269	8,570,913

FISH AND WILDLIFE REVENUE

in years ending March 31

Year	Non-Res. Angling $	Other Fishing $	Commercial Fishing $	Non-Res. Hunting $
1980	5,750,812	111,185	104,928	2,260,030
1981	7,513,033	152,757	122,301	1,605,102
1982	7,610,191	156,957	117,419	1,490,490
1983	7,466,134	169,829	148,254	1,382,798
1984	7,256,322	172,716	65,009	1,212,760

FISH AND WILDLIFE REVENUE

Year	Resident Bear $	Resident Deer $	Resident Moose $	Resident Groundhog $	Res.(Gun) Hunting $
1980	13,359	1,129,511	1,436,576	74,068	1,502,536
1981	87,738	1,184,553	1,483,473	100,653	1,629,245
1982	122,105	1,296,196	1,375,086	83,677	1,584,495
1983	132,636	1,362,761	1,719,562	78,807	1,580,569
1984	147,866	1,507,761	1,404,361	2,782	1,490,967

Year	Dog $	Trappers $	Fur Dealers $	Hunter Exam Fee $	Prov. Park Hunting $
1980	37,179	66,730	8,170	88,797	64,408
1981	76,998	69,635	8,400	90,006	66,088
1982	75,957	65,387	8,950	85,722	53,400
1983	73,258	62,923	9,675	86,178	67,264
1984	72,939	57,252	8,925	59,967	64,712

Year	Misc. Fees & Licences $	Royalty Game $	Agreements Outside Agencies $	Federal $	Total $
1980	153,246	931,496	-	266,117	13,999,328
1981	118,488	1,201,461	76,016	291,475	15,877,422
1982	140,728	1,159,433	123,947	361,447	15,911,587
1983	229,813	729,477	165,750	80,254	15,545,942
1984	194,324	669,126	120,829	431,243	14,939,861

OTHER CASH RECEIPTS

in years ending March 31

Year	Sale of Maps, Publications etc. $	Fire Costs Recovered $	House Rentals $	Sale of Buildings $	Sale of Van and Equip. $
1980	2,253,723	67,234	452,803	26,840	420,736
1981	2,265,256	651,527	415,824	14,513	1,648,707
1982	2,300,366	670,538	450,197	5,112	479,650
1983	686,651	306,055	411,266	30,012	393,846
1984	634,013	160,740	402,108	6,946	490,149

Year	Con-fiscated Articles $	Frost Centre $	Non-Recurring Items and Misc. $	Board & Lodging $	Total $
1980	51,918	245,126	316,672	-	3,835,102
1981	21,714	296,127	378,010	241,577	5,933,255
1982	46,149	340,651	379,107	175,854	4,847,624
1983	59,412	401,061	301,008	204,257	2,793,568
1984	42,695	457,832	403,170	174,739	2,772,392

Administration Division

ADMINISTRATIVE SERVICES BRANCH

Room W-5528, Main Office Telephone (416) 965-2711

Branch Director	J. A. Queen	W-5528.....2711
Administrative Technology	D. Waller, Chief	W-5525.....4600
Analysis Unit	.....	W-5525.....4600
Forms and Records Management	.....	W-5422.....3822
Operations Analysis	R.E. Armstrong, Chief	W-5526.....3317
Administrative Services Analyst	Ms. S. Fasken	W-5520.....4600
Fleet & Insurance	L. Krol	W-5504.....1255
Supply Analysis	Mrs. L. Wright	W-5520.....4600
Contracting Specialist	.....	W-5520.....4600
Contracts Clerk	D. Allison	W-5520.....4600
Purchasing Specialist	W. Howson	W-5520.....4600
Services	T. Pierro, Chief	W-5527.....4600
Purchasing	Ms. M. Marcel, Mgr	W-5533.....1601
Facilities Development	P. Coghill, Mgr	W-5423.....4645
Facilities	J. Petersen	W-5423.....4645
Accommodation Services	S. Fenton	W-5423.....4645
Support Services	H. L. Bembridge, Mgr	W-5302.....5134
Office Services	.....	W-5302.....5134
Vehicle & Assets Officer	L. Burchat	W-5302.....5134
Central Supply Warehouse (51 Esander Drive, Toronto)	D. Sibley, Spvr	1286
Conferences, Hospitality Services	M. D. Cantelon	W-5301.....6166
Copy Centre Services	.....	W-5501.....6790
Mail Services	.....	W-5310.....2778
Telex & Telecopier Services	.....	W-5312.....2784

VEHICLES AND EQUIPMENT IN SERVICE

in year ending March 31, 1984

Type	Number in Operation
Subcompact Cars and Station Wagons	6
Compact Cars and Station Wagons	177
Full-size Cars and Station Wagons	81
Standard and Extended Pickups	819
Four-wheel Drive Vehicles	281
Crew Cabs	84
Passenger Vans and Personnel Carriers	146
Buses	7
Cab and Chassis - 10,000 GVW	89
Cab and Chassis - over 10,000 GVW	126
Cab and Chassis - specialized bodies	26
TOTAL	1,842
Motorcycles	49
Trailers (boat and equipment)	985
Trailers (refrigerated)	26
Snowmobiles	598
Tractors	319

Regions and Districts

NORTHWESTERN REGION

Box 5160, 810 Robertson St., Kenora Ont. P9N 3X9
Phone (807) 468-3111

D. R. Johnston.....	Regional Director
W. J. Straight.....	Deputy Reg. Director
D. R. Fortner.....	Deputy Reg. Director
G. N. McGeachy.....	Admin. Co-ordinator
A. G. Mathews.....	Forester
G. K. Winterton.....	Biologist
G. N. Warner.....	Safety Officer
R. C. Beard.....	Mineral Resources Co-ordinator
R. H. Hanlan.....	Senior Planner
D. M. C. Lindstrom.....	Operations & Services Co-ordinator
K. J. Chambers.....	Resource Development Co-ordinator
W. Kostantin.....	Personnel Officer

Fire Management Centre
R. J. Kincaid, Box 850, Dryden... Phone (807) 937-4402

Dryden Tree Nursery
T. R. Myland, Box 90, Wabigoon... Phone (807) 938-6326

KENORA DISTRICT

Box 5080, 808 Robertson St., Kenora, Ont. P9N 3X9.
Phone (807) 468-9841

D. B. McGregor.....	District Manager
R. G. McCue.....	Administration
D. Philippi.....	Field Services
W. H. Mills.....	Forests
T. J. Lunny.....	Lands
R. W. Paterick.....	Parks
C. E. Blackburn.....	Geologist
M. E. Lemay (acting).....	Mining Recorder

FORT FRANCES DISTRICT

922 Scott Street, Fort Frances, Ont. P9A 1J4
Phone (807) 274-5337

J. K. Cleaveley.....	District Manager
T. M. McWhirter.....	Administration
S. E. Cameron.....	Parks & Operations
E. J. Swift.....	Fish & Wildlife
A. P. Matice.....	Forests
C. E. Horne.....	Land Management
A. P. Colfer.....	Pilot

SIOUX LOOKOUT DISTRICT

Box 309, Sioux Lookout, Ont. P0V 2T0
Phone (807) 737-1140

A. J. Stewart.....	District Manager
W. L. Bertrand.....	Administration
H. D. Morrison.....	Operations/Parks
A. A. Martin.....	Fish & Wildlife
B. A. Ferguson.....	Forests Management
F. E. Brown.....	Land Management
D. A. Janes.....	Geologist
A. Hanson.....	Mining Recorder

DRYDEN DISTRICT

Box 730, Ontario Govt. Bldg., Dryden, Ont. P8N 2Z4
Phone (807) 223-3341

G. M. Tupling.....	District Manager
J. A. Hamilton.....	Administration
J. A. MacDonald.....	Parks & Operations
F. D. Kennedy.....	Forest Management
H. Gibbard.....	Fish & Wildlife
E. M. Wires.....	Land Management

RED LAKE DISTRICT

Box 5003, Red Lake, Ont. P0V 2M0
Phone (807) 727-2253

E. W. Everley.....	District Manager
B. A. Larkin.....	Administration/Operations
B. A. Sandilands.....	Fish & Wildlife
P. R. Gagnon.....	Forests
E. R. Keast.....	Land Management/Parks
M. J. Lavigne.....	Geologist
A. S. Rivett.....	Mining Recorder

IGNACE DISTRICT

Box 448, Ignace, Ont. P0T 1T0
Phone (807) 934-2233

T. E. Dodds.....	District Manager
W. A. Brunton.....	Administration
P. R. Croskery.....	Fish & Wildlife
R. D. Scott.....	Forests
J. D. Bond.....	Field Services
P. J. Pincombe.....	Land Management

NORTH CENTRAL REGION

Box 5000, Ontario Government Building
435 James St. South, Thunder Bay 'F' Ont. P7C 5G6
Phone (807) 475-1261

G. P. Elliott	Regional Director	
L. M. Affleck	Deputy Reg. Director	
W. Hendry	Deputy Reg. Director	
J. D. Chadwick	Admin. Co-ordinator	1221
R. T. Thomson	Biologist	1231
A. B. Johnson	Fire Mgt. Program Manager	1265
R. B. Adamson	Engineer	1301
J. T. Rudolph	Forester	1251
D. J. Murray	Lands Co-ordinator	1321
A. W. Currie	Parks/Rec. Co-ordinator	1281
K. G. Fenwick	Geologist	1331
M. N. Kantymir	Personnel	1201
J. E. Jackson	Senior Planner	1495
F. Barbetti	Information Officer	1695

Dorion Trout Rearing Station, F. S. Watson	Phone (807) 857-2322
Regional Fire Centre	
L. R. Hutchinson - Fire services	Phone (807) 475-1664
R. Doyon - Fire Operation	Phone (807) 475-1405
Thunder Bay Forest Nursery, R. A. Klapprat	Phone (807) 939-2558

THUNDER BAY DISTRICT

Box 5000, Thunder Bay 'F', Ont. P7C 5G6
Phone (807) 475-1511

D. E. McHale	District Manager
B. G. Griffin	Administration
H. D. Howell	Fish & Wildlife
R. G. Klein	Forests
T. J. Leveque	Parks & Rec.
J. W. Suttie	Lands & Eng. Serv.

GERALDTON DISTRICT

Box 640, Geraldton, Ont. P0T 1M0
Phone (807) 854-1030

E. H. Stone	District Manager
L. S. Morrow	Administration
W. J. Cook	Fish & Wildlife
D. Jovic	Forests
A. Hoshino	Lands, Parks & Eng. Services

ATIKOKAN DISTRICT

108 Saturn Avenue, Atikokan, Ont. P0T 1C0
Phone (807) 597-6971

A. M. Harjula.....	District Manager
B. A. Prince.....	Administration
R. N. Boyle.....	Field Services
B. H. Gibson.....	Fish & Wildlife
R. J. White.....	Forests
D. H. Elder.....	Lands & Parks

NIPIGON DISTRICT

Box 970, Nipigon, Ont. P0T 2J0
Phone (807) 887-2120

J. E. Christian.....	District Manager
M. Wilson.....	Administration
L. Townes.....	Fish & Wildlife
S. Tenaglia.....	Forests
D. Bean.....	Lands & Parks & Eng. Serv.

TERRACE BAY

Box 280, Terrace Bay, Ont. P0T 2W0
Phone (807) 825-3205

P.A. Strassburger.....	District Manager
.....	Field Services & Administration
J. A. Chappel.....	Fish & Wildlife
J. Nickleson.....	Lands & Parks

Manitouwadge Work Centre
Box 309, Manitouwadge, Ontario
P0T 2C0 Phone (807) 826-3225
R. Waito..... Forests

NORTHERN REGION

Box 3000, 140 Fourth Ave., Cochrane, Ont. P0L 1C0
Phone (705) 272-4287

R. Riley..... Regional Director
M. P. Barker..... Deputy Reg. Director
R. I. Thompson..... Admin. Co-ordinator
L. Lambert..... Deputy Reg. Director
60 Wilson Avenue, Timmins, Ont. P4N 2S7
Phone (705) 267-1401
J. Young..... Biologist
H. I. Mattson..... Parks & Rec. Co-ordinator
J. S. Dougan..... Personnel Co-ordinator
W. E. Belisle..... Fire Management
C. Roswalka..... Safety Officer
4 Government Rd E., Kirkland Lake, Ont. P2N 1A1
Phone (705) 567-5421
W. O. Mackasey..... Mineral Res. Co-ordinator
M. S. Paradis..... Eng./Lands Co-ordinator
T. Isherwood..... Forester
R. J. Landry..... Operations Manager

Swastika Forest Station, L. J. Forcier..... Phone (705) 642-3255
Hill's Lake Trout Rearing Station, P. Graf..... Phone (705) 544-2834

COCHRANE DISTRICT

Box 730, 2 Third Ave, Cochrane, Ont.
P0L 1C0 Phone (705) 272-4365

J. F. Gosnell..... District Manager
G. Nantel..... Administration
A. C. Hutchinson..... Field Services
J. Starr..... Forests
R. J. Jackson..... Fish & Wildlife/Lands

KAPUSKASING DISTRICT

6 Government Road, Kapuskasing, Ont P5N 2W4
Phone (705) 335-6191

R. G. Lightheart.....	District Manager
L. Keller.....	Administration
C. Jessop.....	Fish & Wildlife
K. Buck.....	Forests
D. Miller.....	Lands & Parks

CHAPLEAU DISTRICT

190 Cherry Street, Chapleau, Ont. P0M 1K0
Phone (705) 864-1710

F. J. Wilson.....	District Manager
J. R. Russell.....	Operations Manager
P. W. Varrin.....	Fish & Wildlife
P. K. Bidwell.....	Forests
J. P. Dick.....	Lands & Waters
G. W. Dingee.....	Parks & Rec.

KIRKLAND LAKE DISTRICT

Box 129, Swastika, Ont. P0K 1T0
Phone (705) 642-3222

C. E. Emblin.....	District Manager
G. E. Allick.....	Operations Manager
L. Chamberlin.....	Fish & Wildlife
R. I. Thompson.....	Forests
J. A. Colquhoun.....	Lands
W. R. Hill.....	Parks

GOGAMA DISTRICT

896 Riverside Drive, Timmins, Ont. P4N 3W2
Phone (705) 267-7951

A. F. Papineau.....	District Manager
C. Mason.....	Officer-in-Charge
R. Fink.....	Administration
J. Cavanagh.....	Fish & Wildlife
C. Mason.....	Forests
L. LaCarte.....	Lands & Parks

TIMMINS DISTRICT

896 Riverside Drive, Timmins, Ont. P4N 3W2
Phone (705) 267-7951

A. F. Papineau.....	District Manager
V. A. Mathieu.....	Operations Manager
T. Corbett.....	Fish & Wildlife
D. F. Jefferson.....	Forests
C. R. Biggar.....	Lands & Parks

HEARST DISTRICT

631 Front St., Hearst, Ont. POL 1NO
Phone (705) 362-4346

W. H. Therriault.....	District Manager
W. C. Trowsse.....	Administration
L. G. Woods.....	Field Services
S. St. Jules.....	Fish & Wildlife
D. Stillar.....	Forests (362-4264)
M. J. Girouard.....	Lands & Parks

MOOSONEE DISTRICT

Box 190, Moosonee, Ont.
POL 1YO Phone (705) 336-2987

S. Toole.....	District Manager
L. Bent.....	Administration
G. F. McAuley.....	Field Services
K. G. Abrahams.....	Biologist
W. R. Lannin.....	Outdoor Rec.
W. A. Hutchison.....	Lands

NORTHEASTERN REGION

199 Larch Street, 9th Floor, Sudbury, Ont. P3E 5P9
Phone (705) 675-4120

M. A. Klugman.....	Regional Director
J. E. Hamilton.....	Deputy Regional Director
S. Gourlay.....	Admin. Co-ordinator
P. E. Giblin.....	Lands & Waters Co-ordinator
M. Chambers.....	Personnel (acting)
R. G. Running.....	Information Officer
A. W. McClellan.....	Cons. Auth. Program Supervisor
J. L. Canfield.....	Fire Program Manager
W. C. Stevens.....	Forester
J. T. Linklater.....	Parks/Rec. Co-ordinator (acting)
E. A. Wright.....	Lands Co-ordinator
J. R. Chevalier.....	Regional Biologist
H. Walsh.....	Regional Engineer

Sault Ste. Marie, Mining Recorder
M. V. St. Jules..... Phone (705) 949-1231

Sudbury, Mining Recorder
V. Miller..... Phone (705) 675-4125

Tarentorus Trout Rearing Station
.....(S.S. Marie)..... Phone (705) 949-1231

North Bay Trout Rearing Station
M. Bohm (North Bay)..... Phone (705) 663-2311

Sandfield Fish Hatchery
G. Clark (Espanola)..... Phone (705) 859-3370

SAULT STE. MARIE DISTRICT

Box 130, 857 Queen St., Sault Ste. Marie, Ont. P6A 5L5
Phone (705) 949-1231

J. H. Sellers.....	District Manager
H. J. Smith.....	Administration
E. R. Thomas.....	Fish & Wildlife
B. Smith.....	Forests
I. J. Valentine.....	Lands
E. Vaughan.....	Engineering Services

SUDBURY DISTRICT

Box 3500, Stn. A, Sudbury, Ont. P3A 4S2
Phone (705) 522-7823

J. A. Simpson.....	District Manager
M. H. Jackson.....	Administration
F. C. Shaver.....	Field Services
G. J. Haarmeyer.....	Fish & Wildlife
D. R. Potvin.....	Forests
M. K. Smith.....	Lands
D. H. Brunette.....	Parks

NORTH BAY DISTRICT

Box 3070, 222 McIntyre St. W., The Trust Building
North Bay, Ont. P1B 8K7
Phone (705) 474-5550

J. R. Morin.....	District Manager
G. E. Lacelle.....	Administration
M. R. Wolfe.....	Fish & Wildlife
D. E. Honeyborne.....	Forests
R. V. Coulombe.....	Lands & Waters
H. J. Edmundson.....	Parks

BLIND RIVER DISTRICT

Box 190, 62 Queen St., Blind River, Ont. P0R 1B0
Phone (705) 356-2234

R. Lessard.....	District Manager
F. McWhinnie.....	Administration
S. B. Woodside.....	Outdoor Recreation
C. F. Husk.....	Forests
R. H. Wood.....	Lands

WAWA DISTRICT

Box 1160, 22 Mission Road, Wawa, Ont. P0S 1K0
Phone (705) 856-2396

C. D. Clark.....	District Manager
Mrs. J. M. Kern.....	Finance & Administration
A. J. Bull.....	Field Services
E. Armstrong.....	Fish & Wildlife
C. K. Sumi.....	Forest Management
E. V. Uhler.....	Lands
J. T. Stott.....	Parks

ESPANOLA DISTRICT

Box 1340, 148 Fleming St., Espanola, Ont. P0P 1C0
Phone (705) 869-1330

E. N. Arbuckle.....	District Manager
Mrs S. Catling.....	Administration
D. R. Hughson.....	Outdoor Recreation
H. A. Liljalehto.....	Forests
D. C. Carnochan.....	Lands

TEMAGAMI DISTRICT

Box 38, Lakeshore Dr., Temagami, Ont. P0H 2H0
Phone (705) 569-3622

R. B. McGee.....	District Manager
C. M. Hamilton.....	Administration
B. A. Hillier.....	Forests
R. B. Sinclair.....	Lands
S. T. Flemming.....	Outdoor Recreation
D. L. Larabie.....	Temiskaming Testing Lab.

ALGONQUIN REGION

Box 9000, Brendale Square, Huntsville, Ont. P0A 1K0
Phone (705) 789-9611

R. M. Christie.....	Regional Director
J. H. Lever.....	Deputy Reg. Director
J. Carswell.....	Admin. Co-ordinator
T. E. Dodds.....	Forester
P. A. Smith.....	Biologist
A. P. Stephen.....	Engineer
B. Petman.....	Program Manager - Fire Management
J. A. van der Meer.....	Mines & Lands Co-ordinator
G. M. Moroz.....	Parks & Recreation Co-ordinator

Pembroke Trout Rearing Station (Privatized - Envirocon Ltd.)
Phone (613) 687-5935

Skeleton Lake Fish Hatchery
C. Core..... Phone (705) 769-3731

Haliburton-Hastings Fisheries
Assessment Unit..... Phone (613) 332-3940

Algonquin Park Fisheries
Assessment Unit..... Phone (613) 637-2780

Fire Management - Inside Fire Region

J. McCabe.....	Parry Sound.....	(705) 746-4201
T. Russell....	Minden.....	(705) 475-2107
B. Gagnon.....	Pembroke.....	(613) 732-3661
P. Gallagher..	Tweed.....	(613) 478-2330

PARRY SOUND DISTRICT

4 Miller St, Parry Sound, Ont. P2A 1S8
Phone (705) 746-4201

W. J. Lovering.....	District Manager
G. F. Walter.....	Administration
J. F. Gardner.....	Fish & Wildlife
G. C. Felton.....	Forests
J. A. Shalla.....	Parks
L. A. Connelly.....	Lands & Engineering Services

BANCROFT DISTRICT

Box 500, Bancroft, Ont. K0L 1C0
Phone (613) 332-3940

D. J. Vance.....	District Manager
F. A. Buchan.....	Administration
M. F. Rush.....	Parks & Operations
V. B. Collins.....	Fish & Wildlife
F. J. Walker.....	Forests
D. W. McLennan.....	Project Manager
O. J. Fleming.....	Lands
H. D. Meyn.....	Geologist

ALGONQUIN PARK DISTRICT

Box 219, Whitney, Ont. K0J 2M0
Phone(705) 637-2780

G. R. Whitney.....	Park Supt./District Manager
E. A. Dayment.....	Administration
D. F. George.....	Forest Management
J. E. Elliott.....	Lands
L. L. Powell.....	Outdoor Recreation/Asst. Supt.
B. A. Norris.....	Field Services
J. R. Mihill.....	Management Forester

PEMBROKE DISTRICT

Box 220, Riverside Drive, Pembroke, Ont. K8A 6X4
Phone (613) 732-3661

L. J. Haas.....	District Manager
A. H. Plummer.....	Administration
A. E. Armstrong.....	Fish & Wildlife
R. C. A. Gilbert.....	Forests
G. D. Yarranton.....	Lands & Mines
E. N. McKenzie.....	Parks & Services
C. R. Buske.....	Eng. Services

BRACEBRIDGE DISTRICT

Box 1138, Bracebridge, Ont. P0B 1C0
Phone (705) 645-8747

H. P. Endress.....	District Manager
R. E. Bloskie.....	Administration
J. T. Matthews.....	Services
D. M. Brooks.....	Fish & Wildlife
G. K. Schultz.....	Forests
J. A. Bryant.....	Lands
R. G. Ellis.....	Parks

MINDEN DISTRICT

Minden, Ont. K0M 2K0
Phone (705) 286-1521

D. D. White.....	District Manager
R. E. Raby.....	Administration
D. G. Atkinson.....	Fish & Wildlife
B. G. Cross.....	Forest Management
J. E. Dewey.....	Lands, Parks & Services

THE LESLIE M. FROST NATURAL RESOURCES CENTRE

Dorset, Ont. P0A 1E0
Phone (705) 766-2451

G. A. Hamilton.....	Director
R. A. Stewart.....	Plan & Manangement Supt.
W. A. Chambers.....	Operations Supt.
D. R. Elliot.....	Field Services
T. G. Wright.....	Food Services
H. J. Barnhart.....	Maintenance Foreman

Specialists:

A. S. Corlett.....	Forestry
M. E. Buss.....	Fish & Wildlife
C. K. Macdonald.....	Recreation
J. A. Stocking.....	Lands
S. A. Williams.....	Visitor Services

EASTERN REGION

Provincial Government Building,
Concession Road, Kemptville, Ont. K0G 1J0
Phone (613) 258-3413

J. R. Oatway.....	Regional Director
D. E. Gage.....	Deputy Reg. Director, Resources
J. S. Anderson.....	Deputy Reg. Director, Services
W. R. Rowles.....	Admin. Co-ordinator
D. G. Watton.....	Biologist
W. G. Maslen.....	Lands Co-ordinator
J. D. Murray.....	Cons. Auth. Prg. Supervisor
W. P. Barber.....	Parks & Rec. Co-ordinator
J. R. Stork.....	Engineer
T. W. Fletcher.....	Mines Co-ordinator
P. E. Anslow.....	Forester
D. G. Kennedy.....	Field Services Co-ordinator

Codrington Fish Hatchery

A. H. Draves.....	Phone (613) 475-2512

White Lake Fish Hatchery

K. Steele.....	Phone (613) 335-2115

Westport Fish Hatchery

G. E. Raine.....	Phone (613) 273-2106

G. Howard Ferguson Forest Station

A. J. Campbell.....	Phone (613) 258-3413

TWEED DISTRICT

P.O. Box 70, Metcalfe Street, Tweed, Ont. K0K 3J0
Phone (613) 478-2330

R. N. Kervin.....	District Manager
G. J. O'Hearn.....	Administration
M. J. Williams.....	Lands & Field Services
J. C. Williamson.....	Outdoor Rec.
Dr. P. W. Kingston.....	Geologist
A. J. Denys.....	Forests

NAPANEE DISTRICT

1 Richmond 3lvd., Napanee, Ont. K7R 3S3
Phone (613) 354-2173

R. W. Beecher.....	District Manager
R. A. Armstrong.....	Finance, Administration Services & Fire
R. W. Baldwin.....	Fish & Wildlife
R. Griffiths.....	Lands Supervisor
J. C. Matheson.....	Parks Supervisor
S. Thatcher.....	Mineral Resources

BROCKVILLE DISTRICT

Box 605, Oxford Ave., Brockville, Ont. K6V 5Y8
Phone (613) 342-8524

W. V. Hardy.....	District Manager
D. G. Gilmer.....	Administration
G. L. Penney.....	Fish & Wildlife
W. M. Fasken.....	Forests
G. Tabobondune.....	Lands & Field Services
R. A. Barkley.....	Fast Growing Hardwoods Group
S. Thatcher (at Napanee).....	Mineral Resources

CARLETON PLACE DISTRICT

10 Findlay Ave., Carleton Place, Ont. K7C 3Z6
Phone (613) 257-5735

M. S. Millar.....	District Manager
G. N. Sanderson.....	Administration & Field Services
J. D. McCready.....	Forests
R. N. Jones.....	Fish, Wildlife & Lands
R. M. Rogers.....	Lands
M. A. MacDonald.....	Mineral Resources
K. J. Schonauer.....	Parks

CORNWALL DISTRICT

Box 1749, 113 Amelia St. Cornwall, Ont. K6H 5V7
Phone (613) 933-1774

R. J. Cleroux.....	District Manager
W. J. Humphrys.....	Administration
P. A. McDonald.....	Fish, Wildlife, Fire & Engineering
B. W. Warwick.....	Forest Management
K. E. Green.....	Parks & Recreation
B. W. McCue.....	Lands Co-ordinator

CENTRAL REGION

10670 Yonge St., Richmond Hill, Ont. L4C 3C9
Phone (416) 884-9203

M. B. Fordyce	Regional Director	295
A. D. Latornell	Deputy Reg. Director	297
H. Tjoelker	A/Deputy Reg. Director	290
R. M. Clouthier	A/Administrative Co-ordinator	208
J. B. Dawson	Biologist	247
J. J. McFadden	Cons. Auth. Co-ordinator	232
E. L. Borczon	Forester	289
M. Narain	Geologist	205
T. M. Kurtz	Service Engineer	234
J. T. Griffin	Parks Rec. Co-ordinator	299
M. A. Groneng	Lands & Mines Co-ordinator	216

Midhurst Forest Station, Midhurst
K. H. Reese..... Phone (705) 728-2900

Orono Forest Station, Orono
G. R. McLeod..... Phone (416) 983-9147

Ontario Tree Seed Plant, Angus
B. D. Swaile..... Phone (705) 424-5311

Deer Lake Fish Hatchery, R.R.#1, Havelock
G. T. Cation..... Phone (705) 778-3391

Ringwood Fish Hatchery
B. Marchant..... Phone (416) 640-6204

MAPLE DISTRICT

Maple, Ont. L0J 1E0
Phone (416) 832-2761

I. B. Earl	District Manager	203
W. B. Pottelberg	Administration	300
D. M. Hogg	Outdoor Recreation	211
Si Dae Kim	Forests, Field Services	224
B. Anderson	Lands & Mineral Resources	208

LINDSAY DISTRICT

322 Kent St. West, Lindsay, Ont. K9V 4T7
Phone (705) 324-6121

W. H. Forman.....	District Manager
A. V. Kaufman.....	Administration
P. Smith.....	Fish & Wildlife
G. Higham.....	Forests, Field Services
L. C. Selby.....	Lands & Minerals
G. Scott.....	Parks

HURONIA DISTRICT

Midhurst, Ont. L0L 1X0
Phone (705) 728-2900

W. D. Mansell.....	District Manager
D. H. Poff.....	Administration
A. W. Smith.....	Fish & Wildlife
R. O. Brandes.....	Forests
D. R. MacArthur.....	Services
J. R. Winters.....	Parks

CAMBRIDGE DISTRICT

Box 2186, Cambridge, Ont. N3C 2W1
Phone (519) 658-9355

W. R. Catton.....	District Manager
B. J. DeGunst.....	Administration
T. Taylor.....	Fish & Wildlife
S. Yorgan.....	Forest Management
R. L. Houck.....	Parks
D. A. Routly.....	Lands & Minerals

NIAGARA DISTRICT

Box 1070, Hwy. 20, Fonthill, Ont. L0S 1E0
Phone (416) 892-2656

J. E. Dickenson.....	District Manager
A. J. Vos.....	Administration
E. A. Kraker.....	Forests, Field Services
P. J. Drysdale.....	Outdoor Rec.
J. Z. Fraser.....	Lands & Minerals

SOUTHWESTERN REGION

659 Exeter Rd., Box 5463, London, Ont. N6A 4L6
Phone (519) 681-5350

D. W. Schafer..... Regional Director
J. D. Parker..... Deputy Reg. Director

Co-ordinators

D. W. Munch..... Finance & Administration
H. A. Orr..... Fisheries
R. J. McClure..... Conservation Authorities
P. H. Crook..... Planning & Design
J. A. Fingland..... Forests and Wildlife
P. A. Palonen..... Mineral Resources
G. E. Martelle..... Parks & Recreation
D. C. Watt..... Personnel
R. P. Wells..... Enforcement

Chatsworth Fish Hatchery
G. M. Durant..... Phone (519) 794-2340

Normandale Fish Hatchery
W. A. Hooper..... Phone (519) 426-3142

St. Williams Forest Station
A. A. Wynia..... Phone (519) 586-3576

Petroleum Resources Lab/London
(Vacant)..... Phone (519) 433-8431

CHATHAM DISTRICT

Box 1168, 435 Grand Avenue, Chatham, Ont. N7M 5L8
Phone (519) 354-7340

W. L. McNab..... District Manager
B. Hall..... Support Services
H. Manson..... Fish & Wildlife
K. Yaraskavitch..... Forests, Mineral Resources
A. D. Carr..... Parks
H. W. Rowe..... Extension Services

SIMCOE DISTRICT

645 Norfolk St. North, Simcoe, Ont. N3Y 3R2
Phone (519) 426-7650

M. F. McKenzie.....	District Manager
A. McGarrity.....	Support Services
J. M. Collins.....	Resource Planning
R. Manley.....	Operations
W. L. Edwards.....	Extension Services

OWEN SOUND DISTRICT

611 Ninth Avenue East, Owen Sound, Ont. N4K 3E4
Phone (519) 376-3860

R. W. Tippett.....	District Manager
M. Gobeil.....	Support Services
S. A. Monroe.....	Lake Huron Fishery Operation Co-ordinator
W. J. Lambie.....	Forest Resources
P. H. Baxter.....	Parks, Fish & Wildlife
K. Hawthorne.....	Extension Services
E. G. Walker.....	Reg. Fire Co-ordinator

WINGHAM DISTRICT

R.R. #5, Wingham, Ont. N0G 2W0
Phone (519) 357-3131

J. L. Hamill.....	District Manager
O. E. Crawford.....	Support Services
W. A. Creighton.....	Resource Planning
H. R. Lancaster.....	Operations
T. R. Carter.....	Mineral Resources
R. H. Spurr.....	Extension Services

AYLMER DISTRICT

353 Talbot St. W., Aylmer, Ont. N5H 2S8
Phone (519) 773-9241

M. G. Lewis.....	District Manager
D. L. Clarke.....	Support Services
G. R. Austin.....	Operations
W. C. Gilmore.....	Resource Planning
D. G. Ward.....	Extension Services
J. W. E. Lau.....	Mineral Resources

Current publications of the Ontario Ministry of Natural Resources, and price lists, are obtainable through the Ministry of Natural Resources, Public Information Centre, Room 1640, Whitney Block, 99 Wellesley Street West, Toronto, Ontario, M7A 1W3 (personal shopping and mail orders).

And:

Personal shopping: Ontario Government Bookstore, Main Floor, 880 Bay Street, Toronto.

Mail orders: MGS Publications Services Section, 5th Floor, 880 Bay Street, Toronto, Ontario, M7A 1N8.
Telephone: 965-6015
Toll free long distance, 1-800-268-7540, in area code 807 dial 0-Zenith 67200.

Cheques or money orders should be made payable to the Treasurer of Ontario and payment must accompany order.